



K. J. SOMAIYA INSTITUTE
OF TECHNOLOGY
COLLEGE OF
ENGINEERING
KOLHAPUR



ETC Junction

A Newsletter

Electronics
And
Telecommunication

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2018-19

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IN THIS ISSUE

PAPER BATTERY

By Shraddha Shigaonkar, Kshitija Shinde,
Ankita More, Shreyas Patil (S.Y.BTech)

The battery can be designed as electronic device comprised of (one or more) electrochemical cells. The chemical energy of cells can be converted into electrical energy. A paper battery is an electric battery energized to use a spacer formed largely of cellulose paper battery is becoming increasingly significant as technology tend towards thinner and more paper like devices standard university of California have successfully turned paper coated with ink made of silver and carbon nano-material into a paper battery that holds promise for new types of light weight, high performance energy storage. Paper battery is the flexible and thin energy device which can be used as battery or as a capacitor. This battery can be produced by merging the nanotubes (carbon) and nano compensate paper (made using cellulose). The same feature that helps ink add to paper allows it to hold onto single walled carbon nanotubes and silver nano wires. The paper battery also shows high energy storage capacity and high energy density, so produce extreme power.

WORKING:

A conventional battery or rechargeable battery contains a number of separate

components that produce electrons through a chemical reaction between the metal and the electrolyte of the battery. Internal operation of batteries is same as that of conventional battery generating about 1.5V. If one can recall traditional batteries work in a manner where positive charged particle called ions and negative charged particle called electrons moves between positive electrode as anode and negative electrode as cathode through the conductor, Since electrolyte is an insulator and does not provide a free path for electrons to travel.

Similarly in paper batteries which works when the paper is dipped in the ion based liquid solution, then chemical reaction takes place between liquid and electrode. The electrons move from cathode to anode to generate electricity. The paper electrode store energy while recharging within 10 seconds because the ions flow through a thin electrode quickly. The best method to increase the output of a battery is to stack different paper batteries one over the other.



Guest lecture: Ms.Shivani Chougule

Guest lecture to BE students for the preparation of KPIT campus recruitment dated on 26th July 2018. Some TE students also attended the lecture along with BE students.



Guest lecture – Mr.Milind Patil

For B.E. E&TC we have been planned guest lecture on "Embedded Systems". Lecture is scheduled on 2nd Aug. 2018 from 10:00 am to 12:00 noon.



Guest lecture – Mr. Neeraj Shah

For S.E. E&TC, we have been planned guest lecture on "Mind Power". Lecture

is scheduled on 1st Sept. 2018 from 9:00 am to 2:00 pm. Resource person is experienced in teaching, Mr. Neeraj Shah our esteemed alumni from first batch.



Parents' Meet

In the ETC department, parents' meet was held with the main motive of conveying the parents the progress of their respective wards. The meet began with introduction to all the faculty members as well the department. The parents were told the importance of industrial training, visits, internships and were asked to motivate their children and thoroughly get them prepared for the campus. The main stress was on KPIT technologies as the institute has MOU with the organisation and also it hires a good number. In addition to this, the first three toppers of each class as well as the five core members of ASSETS were felicitated by their parents. The meet indeed was a great opportunity where parents, faculty members and students came together and had a good interaction.



Guest lecture – Mr. Uday Patil

For T.E. E&TC we have been planned guest lecture on "Antenna & Wave Propagation". Lecture is scheduled on 3rd Oct. 2018 from 9:00 am to 11:00 am. Resource person is experienced in teaching, Mr. Uday Patil Assistant professor in Department of Technology, Shavaji University, Kolhapur.

Guest lecture – Ms. Shruti Korane

For T.E. E&TC, we have been planned guest lecture on "PLC Programming". Lecture is scheduled on 6th Oct. 2018 from 9:00 am to 5:00 pm. Resource person is experienced in teaching, Ms. Shruti Korane from SKADA.



IETE Sub Centre Relocation Inauguration at KIT on 6 October 2018:



Department of Electronics and E&TC of KIT's College of Engineering Kolhapur organized inaugural function of relocated IETE sub centre, Kolhapur for western region. The IETE Sub centre will cover Sangli, Satara, and Kolhapur etc.

The Chief Guest of the function was Dr. Reddy, President, IETE, New Delhi. & The Guest of Honor was Dr. S. K. Khedkar, Mentor, West Zone, IETE, New Delhi and Member, Finance Planning and

Policy Commission, IETE, New Delhi. Along with Dr. V. N. Pawar, Member, Board Of Studies, Electronics and Telecommunication Engineering University of Mumbai and Ex Honorable Treasurer and Honorable Secretary of IETE, Navi Mumbai.

Dr. Reddy Enlighten Students and Faculty Members regarding various benefits of IETE and also commented on the funding to organize seminars, workshops and projects in collaboration with IETE. Dr. Khedkar advised to use the facilities available with IETE to enhance their skills. Dr. Vijaykumar N. Pawar also addressed the gathering. He gave a lot of information on the IETE benefits in Engineering Institutes. Felicitation of Newly appointed Chairman, Dr. S.R. Chougule and members of IETE from KIT is done. Mrs. Ashwini Shinde has got selected as Treasurer of IETE Sub centre Kolhapur.

The Welcome speech was delivered by Dr. V. V. Karjinni, Director KIT's College of Engineering (Autonomous). Mrs. A. A. Shinde, Member, IETE was declared as a New Treasurer for IETE.

Vote of Thanks was delivered by Secretary of IETE, Prof. R. T. Patil, RIT, Islampur.

Training Program: Advanced C++ Programming Language

For E&TC, we have been planned guest lecture on "PLC Programming". Lecture is scheduled from 1-3 Nov. 2018 from 9:00 am to 5:00 pm. No of students enrolled: 58.



One week FDP On “Emerging Trends in Signal Processing” from 08/01/2019 to 12/01/2019:

We the Department of Electronics & Telecommunication at K.I.T.'s College of Engineering (Autonomous), Kolhapur had organized a one week FDP on “Emerging Trends in Signal Processing” during 08/01/2019 to 12/01/2019 held under IETE. Total 27 participants attended the FDP. Inauguration of the FDP was carried on 08/01/19 by Mr.Sushant Kerimani , Director, SKADA Technology, Pune. On Day 1, Mr. Sushant Kerimani introduced concepts of PLC & SKADA. He also provided hands on training on PLC.

On Day 2, Dr.M.S.Sutaone (Dean Academic Affairs, COEP, Pune) discussed basic concepts of Wavelet Transform. He discussed case studies of Wavelet Transform. He discussed about wavelet compression. He explained how discrete wavelet transform can be used for the compression of ECG signals.

Dr.P.P.Bartakke (Professor, COEP, Pune) discussed about Deep learning.

On Day 3, Mr.S.S.Mulla (Professor,SSPM's College of Engineering, Kankavali) discussed concepts of microstrip antenna, design of microstrip antenna and provided hands on training on HFSS.

On Day 4, Mr.R.D.Bhosale, introduced basic concepts of Image processing and gave hands on training on image processing.

On Day 5, Mr. V.S.Shirwal, discussed case studies in Wireless communication.

Mr.A.L.Renke, discussed case studies on Wireless communication.

Mr.P.B.Mane (Principal, AISSMS Institute of Information Technology, Pune) discussed about Paper writing skills, Patent filing.



PIONEER 2019

Event Name : Gyan-O-Pedia

Event Theme : First round about technical Aptitude

Second round was related to Circuit Implementation on Breadboard. At last round, one C program was given to all participants and winners decided on the basis of actual programming logic.

Date of the event: 27th January 2019

Student Coordinator: Ms. Sakshi Kondekar

Faculty Coordinator : Mrs. Ashwini Shinde

Registration Fee :100 per head

No. of Registrations: 41(20 grps)

Participants Colleges : (D.Y.PatilCollege of Engg., DKTE, BVCOEK, DOT ,Shivaji University, KITCOEK, SGI)

Details of Judge/Guests : Mr. E. C. Patil, Dept. of E&TC, KITCOEK

Sponsors Details : (Autowizard Multibrand service station,

Winners Name :

1. Girish Mali and Sudam Chougule, KITCOEK

2. Pruthviraj Chavan and Smital Patil, KITCOEK

Event Name: Web Series Mania

Event Theme:

First round – General questions related to the series. Second round – Part 1- Shadow recognition & Part 2 – Names of characters. Third Round – Part 1- Dialogue recognition & Debate

Date of the event :28th January 2019

Student Coordinator : Ms. Soumya Magdum

Faculty Coordinator : Mrs. Ashwini Shinde

Registration Fee :50 per head

No. of Registrations : 90

Participants Colleges : (D.Y.PatilCollege of Engg., DKTE, BVCOEK, DOT, Shivaji University, KITCOEK, SGI)

Details of Judge/Guests: Mr. E. C. Patil, Dept. of E&TC, KITCOEK

Sponsors Details : RKC spices, amount

Winners Name :

1. Nupur Kavthekar and Aditya Joshi, KITCOEK

2. Rohan Kurdekar and Mihir Madnaik , KITCOEK

Report of Parent Teachers Meeting on 10 March 2019

The Department of Department of Electronics and Telecommunication Engg organized a Parent-teacher meeting on 10th March 2019. at 10:30 am. The main purpose of meet was to create a common platform, where teacher and parents come together to enrich the student's educational experiences and discuss variety of issues, regarding all round development of students.



Department Achievements:

Our student Ms.Shubhangi Bhallal stood 4th rank in Shivaji University.



Our student Ms.Komal Desai stood 5th rank in Shivaji University.



S.Y.BTECH Visit to Tomato FM on 24 March 2019

The SE students of E&TC department had visited to tomato FM station as a part of the syllabus. Prof. Sontakke was with us as a faculty Coordinator. Students were very excited to receive all the knowledge regarding how the tomato FM works.

Student's enthusiasm raised as they entered in tomato FM station. There were different sectors such as marketing, editing sector, commercial sectors along with technical room.

Student came to know more about signal transmitting and receiving, post modulation, role of mixer before transition of signal and separation of voice and carrier. For the detailed information, they demonstrated recording in front of students with the help of some students who were good in singing. Students also came to know how modulation of signal occurs.

They cleared all doubts and queries regarding FM modulating signal and its modulation and all the students of SY class left tomato FM station with more information and satisfaction.

MOUs

- **KPIT Technologies**
- **SKADA Technology Solutions Pvt. Ltd.**
- **Shimpukade Metals Pvt. Ltd.**

Placements in 2018-19:

| Department of Electronics & Telecommunication | | |
|---|-----------------------------|--------------------|
| Placement Data 2018-19 | | |
| Sr. No. | Name of Student | Company |
| 1 | Suraj Pratap Patole | KPIT |
| 2 | Ashish Mohan Kadam | KPIT |
| 3 | Rutuja Manik Pilane | KPIT |
| 4 | Shubham Sunil Patil | KPIT |
| 5 | Indrajit Ravindra Marathe | KPIT |
| 6 | Rutuja Rajaram Kole Patil | KPIT |
| 7 | Purva Chandrashekhar Chavan | KPIT |
| 8 | Ankita Prashant Jadhav | KPIT |
| 9 | Pooja Vitthal Patil | KPIT |
| 10 | Nikita Anant Patil | KPIT |
| 11 | Rajnandini Kiran Patil | KPIT |
| 12 | Shruti Sanjay Chougule | KPIT |
| 13 | Shivani Dinkar Kumbhar | KPIT |
| 14 | Divya Anil Gharal | KPIT |
| 15 | Sakshi Babaso Kondekar | KPIT |
| 16 | Gouri Dhanaji Patil | KPIT |
| 17 | Shivani Sanjay Kulkarni | KPIT |
| 18 | Aishwarya Abhijeet Joshi | KPIT |
| 19 | Pooja Sanjay Khane | KPIT |
| 20 | Pragati Satish Mohite | KPIT |
| 21 | Akshata Shekhar Kamble | KPIT |
| 22 | Prashant Desai | eMphasis |
| 23 | Vrushali Kulkarni | eMphasis |
| 24 | Dhanshree Desai | KPIT |
| 25 | Preeti Pawar Patil | KPIT |
| 26 | Nikita Bhosale | KPIT |
| 27 | Mrunali Patil | KPIT |
| 28 | Pranavi Patil | KPIT |
| 29 | Vijay Valsankar | KPIT |
| 30 | Prashant Desai | KPIT |
| 31 | Pradeep kamble | Qspider |
| 32 | Sangannbhasav Mali | Qspider |
| 33 | Aishwarya Misal | Dhoot Transmission |
| 34 | Rutuja Patil | Dhoot Transmission |
| 35 | Vinita Latwadekar | Dhoot Transmission |
| 36 | Rutuja Chavan | Dhoot Transmission |







STUDENTS ACHIEVMENT IN PLACEMENT







Year 2018-19







| Sr. No | Photo of Student | Details |
|--------|---|--|
| 1 |  | Name: Name :- SURAJ PATOLE |
| | | Passing Year:-2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| 2 |  | Name:- ASHISH MOHAN KADAM |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:-3.25LPA |
| | | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| 3 |  | Name:- RUTUJA MANIK PILANE |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| 4 |  | Name:- SHUBHAM PATIL |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| 5 |  | Name:- INDRAJEET MARATHE |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| 6 |  | Name:- RUTUJA KOLEPATIL |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |

| Sr. No | Photo of Student | Details |
|--------|---|--|
| 7 |  | Name: Name :- PURVA CHAVAN |
| | | Passing Year:-2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| 8 |  | Name:- ANKITA JADHAV |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:-3.25LPA |
| | | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| 9 |  | Name:- POOJA PATIL |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| 10 |  | Name:- NIKITA PATIL |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| 11 |  | Name:- RAJNANDANI PATIL |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| 12 |  | Name:- SHRUTI CHOUGULE |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |

| Sr. No | Photo of Student | Details |
|--------|---|--|
| 13 |  | Name: Name :- SHIVANI KUMBHAR |
| | | Passing Year:-2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| 14 |  | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| | | Name:-DIVYA GHARAL |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:-3.25LPA |
| 15 |  | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| | | Name:-SAKSHI KONDEKAR |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| 16 |  | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| 17 |  | Name:-SHIVANI KULKARNI |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| 18 |  | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| | | Name:-AISHWARYA JOSHI |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |

| Sr. No | Photo of Student | Details |
|--------|---|--|
| 19 |  | Name: Name :- POOJA KHANE |
| | | Passing Year:-2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| 20 |  | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| | | Name:- PRAGATI MOHITE |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:-3.25LPA |
| 21 |  | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| | | Name:- AKSHATA KAMBLE |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| 22 |  | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Passing Year:- 2018-19 |
| 23 |  | Name:- VAISHNAVI KULKARNI |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| 24 |  | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| | | Name:- DHANASHRI DESAI |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |

| Sr. No | Photo of Student | Details |
|--------|---|--|
| 25 |  | Name :- PREETI PAWARPATIL |
| | | Passing Year:-2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| 26 |  | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| | | Name:- NIKITA BHOSALE |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:-3.25LPA |
| 27 |  | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| | | Name:- MRUNALI PATIL |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| 28 |  | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Passing Year:- 2018-19 |
| 29 |  | Name:- VIJAY VALSANKAR |
| | | Passing Year:- 2018-19 |
| | | Company Name:-KPIT TECHNOLOGIES |
| | | Package per Annum:3.25LPA |
| | | Entrepreneur: |
| 30 |  | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| | | Name:- PRADEEP KAMBLE |
| | | Passing Year:- 2018-19 |
| | | Company Name:-QSPIDER |
| | | Package per Annum:- |
| | | Entrepreneur: |

| Sr. No | Photo of Student | Details |
|--------|---|--|
| 31 |  | Name :- SANGAMESH MALI |
| | | Passing Year:-2018-19 |
| | | Company Name:-QSPIDER |
| | | Package per Annum:- Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| 32 |  | Name:- AISHWARYA MISAL |
| | | Passing Year:- 2018-19 |
| | | Company Name:-DHOOT TRANSMISSION |
| | | Package per Annum:-1.8 Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| 33 |  | Name:- RUTUJA PATIL |
| | | Passing Year:- 2018-19 |
| | | Company Name:-DHOOT TRANSMISSION |
| | | Package per Annum:-1.8LPA Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| 34 |  | Name:- VINITA LATWADEKAR |
| | | Passing Year:- 2018-19 |
| | | Company Name:-DHOOT TRANSMISSION |
| | | Package per Annum:-1.8LPA Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| 35 |  | Name:- RUTUJA CHAVAN |
| | | Passing Year:- 2018-19 |
| | | Company Name:-DHOOT TRANSMISSION |
| | | Package per Annum:1.8LPA Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |
| 36 |  | Name:- MAYURI VATHARE |
| | | Passing Year:- 2018-19 |
| | | Company Name:-DHOOT TRANSMISSION |
| | | Package per Annum:1.8LPA Entrepreneur: |
| | | Special Achievement If any: MPSC/GRE/TOEFL/UPSC |



Visit to Tomato FM



Parent Teacher Meet



Interaction with Parent

From the HOD's Desk...



21st century is the century of communication as communication engineering has been growing exponentially in recent years. At KIT we have developed state-of-art laboratories & centers of excellence so as to train our students in Electronics and Telecommunication (ETC) through flexible, adaptive and progressive training programs along with cohesive interaction with the academicians and industries. The big theme today is to focus on creativity and innovation alongside academics. Entrepreneurial wealth creation has been explosive on account of the massive impact made by technology start-ups. To develop thought process of students this News Letter helps.

Wish you all happy learning here

Dr. Mrs. Sangeeta R. Chougule
Head of the Department
Electronics & Telecommunication Engineering
KIT College of Engineering (Autonomous) Kolhapur

ETC Junction

A Newsletter

Electronics
And
Telecommunication

Student Chief Editor

Ms. Swarada Phadnis
Ms. Vaishnavi Lavathe

Faculty Chief Editor

Mr. M. D. Sontakke.

Head of the Department

Dr. S. R. Chougule