



VOLUME 7
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BE GOOD
DO GOOD.

SRKR ENGINEERING COLLEGE

(AUTONOMOUS)

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ELECTRIFYING -2K19



MESSAGE FROM THE CHIEF EDITOR

Welcome to *Electrical*, a newsletter for the department of EEE at our reputed Institution SRKREC. This Newsletter Shares the progress in Academic year 2k17-2k18. The information about the events conducted ,activities of the department achievements of our faculty and Students are recorded in this issue Happy Reading!

SANKALP-2K18

SANKLAP is a national level technical fest conducted by department of EEE and organised by Association of Electrical Engineers (AEE). The Sankalp 2k18 was conducted on 20th and 21st December with the theme "ORGANIC FORMING". The Fest was inaugurated by B.Deva Kumar (Chief General Manager, Oil and Natural Gas Agencies, Rajahmundry).

Sankalp-2k18 comprised of many innovative events - Pragnya, Pravyaktha (poster presentation), Srujana(model expo), Yaksha (quiz), Sadhana (short film competition), Inter-state council Mastera- (the best engineer), Gazette-(writing),



Explorer-(tech-hunt), Click-o-bite (photography). A workshop was conducted on 'embedded systems' by Buddha technologies. A total of 740+ students were Participated.



FB PAGE: SRKR AEE

ELECTRICAL CELEBRATIONS

Association of Electrical Engineers (AEE), is one of student organization in the college that runs by the students of EEE Department, conducted many events in the college to help the students gain high competency, to adhere towards work and to achieve goals. In this academic year, AEE organized Teachers day to honor our teachers, and Engineers day to honor the engineers in different streams and feel esteemed for their unremarkable achievements.

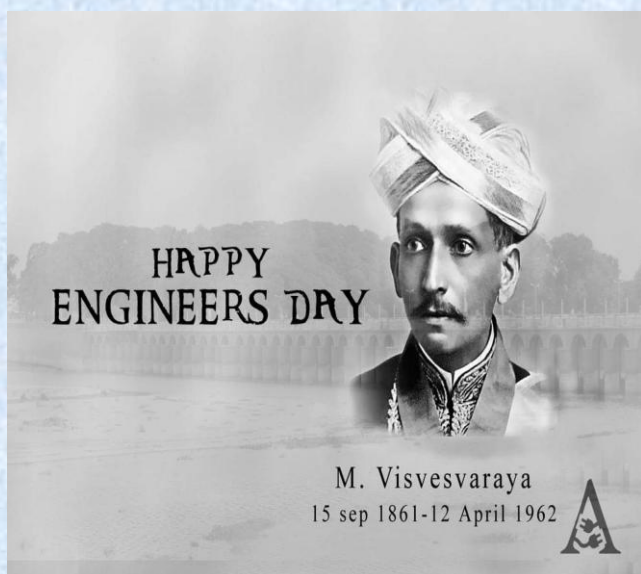
TEACHERS DAY

On the occasion of Dr. Sarvepalli Radhakrishna birthday, i.e., on September 5th 2018 AEE organized teachers day. The Association felicitated all the faculty of the EEE department. The senior faculty of the department guided the students by sharing their experiences.



ENGINEERS' DAY

On September 15, 2018 AEE celebrated engineers' day in EEE department, as a tribute to the Greatest Indian Engineer and Bharat Ratna Sri Mokshagundam Visvesvaraya. The Association established awareness about the prestigious Indian engineers. The association provided platform for the students to express their innovative ideas by project expos and seminar.



PROJECTS

➤ **HEAD-MOTION CONTROLLED WHEELCHAIR**

To aid the people suffering from problem of Quadriplegia a disease that results in paralysis, 3/4 B.Tech Students, Nagaram, Gopi,Srinivas,Prudhvi Guided by Mr A.Kumararaja Assistant Prof. in EEE Dept.,implemented a wheelchair. It is a Head motion controlled wheel chair that uses the tilt motions of head to move itself from one place to another place. This team got shortlisted for MSME presentation on 27th September 2018.



➤ **AUTONOMOUS SOLAR CAR TO AVOID ROAD ACCIDENTS**

In order to avoid car accidents /collisions of vehicles,3/4 B.Tech Students ,Sireesha,Rajeswari, Pravalika Guided by Mr.G.D.K. Prasad ,Assistant Prof., have implemented an idea of Autonomous Solar Car with two operating modes : one with self speed adjusting system and second one is signal alerting system . The proposed method could establish that can reduce the road Accidents by automatic control of speed and signal alerting system.

➤ **HIGH SECURITY BASED DOOR LOCKING SYSTEM:**

As generally the locks of the doors are visible to outside and can be tampered easily, a project named “SMART LOCKERS” is introduced to protect the doors and from setting fampered.



EVENTS ORGANISED BY AEE



ENOVΛ:

This was the first event conducted by AEE in the academic year 2017-2018 on 27th June. The Objective of this event is to improve the problem analyzing skills. The participants were divided into groups, and were asked to solve a few problems that can arise in some complicated situations. About 65 students from EEE Department Participated in this Event and a Good Feedback was received .

A quiz Competition was Conducted on 28th Aug 2018 in the area's of software technology, geography, history and science. As a part of this competition the participants to required to observe a video on the completion of which some questions were asked regarding the video. The objective of this competition is to improve the observational skills. A series of rounds were also conducted with a different approach. About 70 students participated in the event and the feedback was admirable.



AVENIR:

*It was a career guidance program for first-year electrical students conducted on 6th July 2017 . In this, all the career opportunities available after engineering were **discussed** so that they would get an overall view of career paths after engineering.*

ENTWINE:

On 4th September 2017, this event was conducted to bring out many skills such as listening, spontaneity, narrating, communication and mainly our ability to connect our thoughts with others in a team. We have given a word to each member of the team and asked to trade a he/she has story spontaneously by using all the words, which were completely out of the box.

SERVICE ACTIVITIES BY AEE



*On the Occasion of children's day-Nov 14th 2k17 AEE members did a voluntary service in **ARUNODAYA MANOVIKASA KENDRAM-PEDDAMIRAM**, by serving some necessary commodities to all the mentally abnormal children.*

STUDENT ACHIEVEMENTS

- *Mr.P.Kamalesh 4/4 EEE, presented a project implementation of “**Power Lines Monitoring System using GSM**” during innovation day-2018 held on 27th Jan-2018.*
- *Ch. Thirisha, and K.P.ChandraRao,4/4 EEE, have participated in the event PPT conducted in SANKALP-2K17, A national level technical symposium organized by S.R.K.R, held on 28th and 29th of Dec-2017.*
- *K. Anitha 3/4 EEE, won 1st place in shot-put in the internal sports day competitions held in Feb-2018.*
- *Mr.Ch.Nagaram, 3/4 EEE, presented a project on implementation of “Head motion controlled wheel chair” during innovation day-2018 held on 27th Jan-2018.*

STAFF PUBLICATIONS

- N.V.A BHAVANI,I.SWETHA MOUNICA “Power Quality Improvement in Battery Integrated Wind Energy System” *International journal of Control Theory and Application*,VOL10,ISSUE-26,Pages239-250,2017.
- B.PATTIBHIRAM ,”Comparative Analysis of Harmonics by Shunt Active Filter Unit using Resonant current control in Distributed Power System” *International, Journal, I -Manager's Journal on Power Systems Engineering*, issue 1, pages 35-4,feb 2018
- MD AZAHAR AHMED, B MOTHU RAM, K KIRAN KUMAR.” comparison of performance of sssc, asynchronous tie-lines and pso in automatic generation control of interrelated power system under deregulation” *International Journal of Advanced Research in Dynamical and Control Systems*, issue SP 16, pages 20-23, NOV 2017.
- MD AZAHAR AHMED, G VEERANA, B V KRISHNA.” a gist of advanced engineering optimization techniques for tuning pid controller for bldc motor” ,*International journal of advanced research in dynamical and control systems*, issue sp 16, pages 1-7, nov 2017.
- P. UDAYA BHANU, M.D. AZAHAR AHMED “Investigation of PV Connected Multilevel Cascaded H-Bridge Inverter Using Disposition Techniques”, *International Journal of Engineering & Technology*, pages 30-35, AUGUST 2018
- POTHULA JAGADEESH, BSSS SANTOSH.” Voltage Flicker Mitigation Of Non-Linear Loads, *International, journal*”, *I-manager international journal of power systems* , issue 2, pages 11-16, July 2017
- POTHULA JAGADEESH, BH.SUDHARANI,” Analysis of vehicle to grid connected system”, *International, journal, International Conference on Emerging Trends in Engineering Innovations & Technology Management*, pages 1-6, December 2017.
- POTHULA JAGADEESH, A KUMAR RAJA, K KIRAN KUMAR on “Fundamental phasor based fault detection, classification and directional relaying algorithm for series compensated lines”*International, journal, International Conference on Emerging Trends in Engineering Innovations & Technology Management*, pages 1-6, December 2017.
- V. Srinivas, CH .Murali, Y.Bhanuchandar, G.Veeranna.”Published a *Journal of Advanced Research in Dynamical & Control Systems on Correction of Sag/Swell*” by using DVR with Symmetrical Cascaded Multilevel Inverter
- Y.BHANU CHANDAR, CH.MURALI, B.MOTHU RAM, E.SURESH.” D- STATCOM using Space Vector Pulse width Modulation Technique”. *International Journal of Advanced Research in Dynamical and Control System SPECIAL ISSUE-11*, Pg no471-479 2017.
- KUMARRAJA. A, P.JAGADEESH,SK.NAZEER, E.SURESH,”DWT based Symmetrical Fault Detection Method during Power Swing “*International journal ,IEEE International Conference on Circuits Power and Corrupting TECHNOLOGIES (ICCPCT-2017)*.
- BH .SUDHARANI, G D K PRASAD ,P.SUMANTH, “Voice Command Page Turning Robot for Physically Challenged People “, *International Journal of Control Theory and Applications Vol-10,Issue-26,Page No:1-6 ,ISSN NO-0974-5572*.
- G .D.K PRASAD ,P. SUMANTH, BH. SUDHARANI , “Autonomous Solar Car To Avoid Road Accidents “, *International Journal of Control Theory and Applications Vol-10,Issue-26,Page No:1-6 ,ISSN NO-0974-5572*.
- A.HEMANTH KUMAR RAJU,” optimal load frequency Control of Electric Vehicle Based Micro Grid Using Grey Wolf Optimisation “ *International Journal on Computation of Power Energy ,information and Communication(ICCPEIC)*.
- Y.V SAGAR, K. CHAITRESH, SK.B.E.AHMED, K.TEJASWI,” Validation of Signals using Principle Component Analysis” *International Journal of Control Theory and Applications*.

CONFERENCES

- An International conference held on Emerging multidisciplinary research and Computational intelligence attended by B.Mothi ram, G .Veeranna, K. Kiran Kumar , CH.B.L.Navyasri .
- An IEEE International Conference held on Study on Economic load dispatch in power Systems in Environmental perspective by PSO attended by P. Kanta Rao.
- An International Conference held on Load frequency Control of an Interconnected multi area power system with Diverse Scenarios using Swarm based optimization Algorithm attended by **G.Veeranna**, B.Mothi Ram K.Kiran Kumar, CH.Durga Prasad
- Ch.Muraliⁱ, Dr.Ch.Chengaiyah attended an International Conference on Field Oriented
 - Control Of Five Phase Squirrel Cage Induction Generator In Wind Energy Conversion System .
- K.S.S.Prasad Raju, Ch.Murali Attended a international Conference on ANALYSIS OF Harmonic Distortion for Cascaded H-Type Bridge Multilevel Inverter using Different PWM techniques.
- CH.Murali, Y.Bhanuchandar, B.Mothi ram, E.Suresh attended an International Conference on D-Statcom using Space Vector Pulse Width Modulation Technique.

WORKSHOPS

- G. Verranna, B.Mothi ram Attended a Workshop on Digital Signal and Image Processing in S.R.K.R Engineering College during 3rd ,jul,2017 to 10th ,jul,2017.
- G.Verranna Attended a Workshop on Power Electron for Smart Grid and Renewable Energy Control in NIT ,GOA during 15th May 2017 to 19th May 2017
- CH. Murali ,K.S.S.Prasad Raju, B.Mothi Ram Attended a Workshop on Power Electronics for Smart Grid and Renewable Energy Resources in MNIT Jaipur During 15th May 2017 to 19th May 2017
- K.Swetha ,I Swetha Mounica ,A. Kumar Raja Attended a workshop on Research Methodology and Best practices in Academic Research in S.R.K.R. Engineering college. On 16th June 2017.
- Dr. M. Sai Veeraju Attended a Workshop on NMIECT (MHRD) & ISTE –STTP Sponsored Workshop on Power Systems in online Workshop Conducted by IIT Kharagpur at KIET ,KAKINADA during 12th June 2017 to 15th June 2017.

ACADEMIC EXCELLENCE

| | | |
|--|----------------------------|-----|
| FOURTH YEAR | No of students enrolled | 216 |
| | No of students passed | 191 |
| | Percentage of pass(pass %) | 88% |
| <u>Best Outgoing Student(2017-2018)</u> | | |
| ➤ 314175714051-G.V.S.S SAI SRI CHANDANA With CGPA 9.24 | | |
| ➤ She got ALLURI SRI RAMA RAJU MEMORIAL GOLD MEDAL . | | |
| THIRD YEAR | No of students enrolled | 282 |
| | No of students passed | 196 |
| | Percentage of pass(pass %) | 70% |
| SECOND YEAR | No of students enrolled | 282 |
| | No of students passed | 163 |
| | Percentage of pass(pass %) | 58% |

PLACEMENTS

| S.R.K.R. ENGINEERING COLLEGE | | | |
|-------------------------------------|----------------------------|---------------|------------------------------------|
| EEE DEPARTMENT | | | |
| 2017-2018 | | | |
| S.NO | NAME OF THE COMPANY | COURSE | NO OF STUDENTS SELECTED |
| 1 | TATA CONSULTANCY SERVICES | BTECH | 20 |
| 2 | RAMTECH | BTECH | 12 |
| 3 | VIJAYA ELECTRICALS | BTECH | 4 |
| 4 | GSS INFOTECH | BTECH | 4 |
| 5 | GROW CONTROLS | BTECH | 4 |
| 6 | INFOSYS | BTECH | 2 |
| 7 | JBM AUTOMOTIVE | BTECH | 2 |
| 8 | COGNIZANT | BTECH | 2 |
| 9 | WIPRO | BTECH | 1 |
| 10 | AMAZON | BTECH | 1 |
| 11 | CAPGEMINI | BTECH | 1 |
| 12 | NISSAN | BTECH | 1 |
| 13 | CERIUM | BTECH | 1 |
| 14 | DXCORR | BTECH | 1 |
| 15 | PANASONIC | BTECH | 1 |
| 16 | DXC TECHNOLOGIES | BTECH | 1 |

NAME OF THE STUDENT SELECTED IN TCS:

AVINASH VARMA.K, SWETHA RAMANI.B, KALYAN CHAKRAVARTHY.C, SAI TEJA.K, ANJANI MANASA.K, VENKATA SATYA DHEERAJ.K, NAVYA PRIYANKA.K, HARIKA.K, VIJAY SAI.K, VIJAYA KRISHNA REDDY.M, RAKESH.P, LEELA SIVA PRASAD NAIDU.P, YASWANATH REDDY.P, JOEL SAMUEL SERAPH.P, RAMESH.S, SATISH KUMAR.V, RAVI VARMA.Y, SUSHMA REDDY.K, BINDU MANASWI.R.

NAME OF THE STUDENT SELECTED IN RAMTECH:

SRAVAN VARMA.B, NAGA MANIKANTA.D, DURGA PRASAD.G , SAI KIRAN.I, VENKATA MONISH.N, ANANTHA NAG.N, LEELA VENKATA SAI TEJA.S, SRI RAM PRASAD.T, NAGA BABU.U, NAGESWARA RAO.A, RAJESH VARMA.A, LUKA.B .

NAME OF THE STUDENT SELECTED IN OTHER COMPANIES:

SRI RAM PRASAD.T, NAGA BABU.U-(JBM AUTOMOTIVE), BALA SAI PARASURAM.I, CHANDU.K, SREERAM KUMAR.P, VENKATA SAI RAMA DUTTA.V-(GSS INFOTECH), PRAVEENA.N-(DXCORR), VIJAY SANDEEP VARMA, BHANU PRAKASH.I, BALA SAI PRASURAM.I, LUKA.B-(VIJAYA ELECTRICALS), KAMESWARA SAI CHARAN.A, SIVA SURYA.K, KARTHIKA SAMBAVA SIVA.T, RAJESH VARMA.A-(GROW CONTROLS), PREM RAJU.C-(PANASONIC), LAKSHMI TEJASWI.M, NAGABABU.U- (INFOSYS), SATISH.B-(CERIUM), AVINASH VARMA.K-(NISSAN), RAJA NANDINI.B, SK SAILAJA.K-(COGNIZANT), SAI SRI RAM CHARAN-(CAPGEMINI), VIJAY KUMAR.B-(DXC TECHNOLOGIES), CHAITANYA SRAVANTHI.P-(AMAZON), NAGA LAKSHMI.U-(WIPRO).

NEW FACILITIES

The mission of the Electrical Department is to enhance knowledge and educate students in latest technologies used in industry and power sector. We are committed to generate, disseminate and preserve knowledge and to use it to bear the world's great challenges. The labs of electrical engineering departments are well equipped with latest equipments/tools/instruments and machines to cater to the requirements of engineers and researchers .

POWER SYSTEM PROTECTION

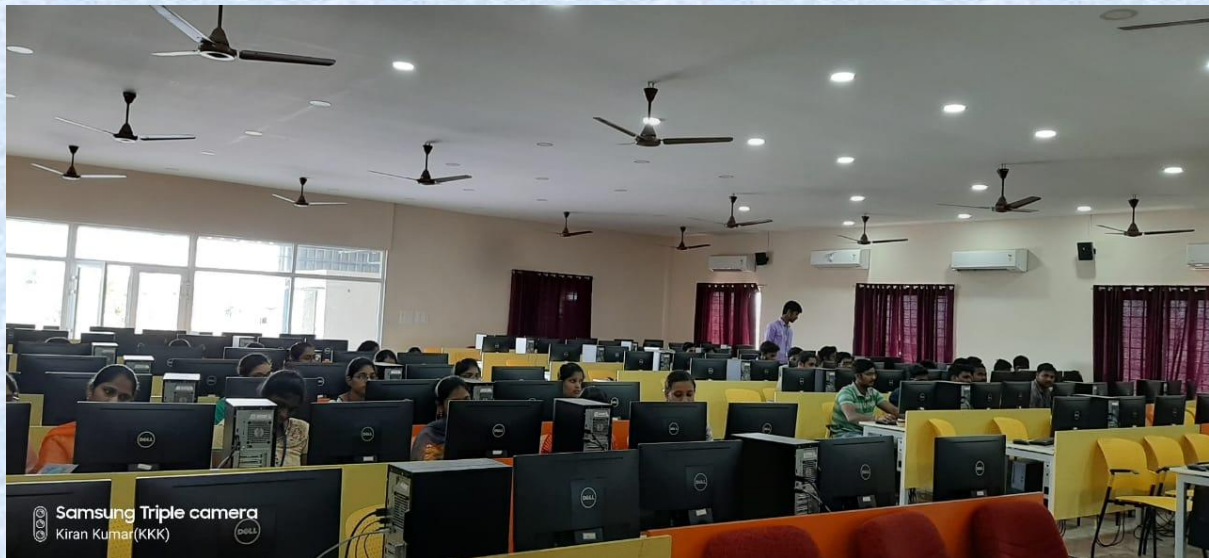


It is one of the major facility to provide in our college by motivating the students how to reduce the faults in the time of generation, transmission and distribution of power. The equipments used in this laboratory are modern equipment which is very beneficial for students in order to capable of improving their practical knowledge. The power packed EEE department inspires the budding electrical engineers with the potent idea of the constructing this power protection laboratory in the year 2k16.

DIGITAL LEARNING LAB

Although technology is critical to multimedia work, this laboratory distinguish and providing a key strength for electrical engineers. This laboratory constructing in the year 2k17 in EEE department with full of high -end computers optimised for multimedia projects such as audio

and video editing graphic design data visualization 3D modelling and web site design.



Students work in this lab not only for 3D design and web design but also helps in connecting of internet of things and cloud computing which is implementing techniques of modern society. Digital learning lab will helps to students which builds a wide variety of skillsets from audio editing to story telling, visualization, data bases and community outreach. It's conceptual focus on teaching integrated digital resources with fully utilised learning tools.

WIRING LAB



This lab introduces the students to the basic electrical measuring equipments and they will deal with some of the frequently used

instruments and equipments, like the digital multimeter, tester etc. The students obtain the basic knowledge about different types of wiring circuits, behaviour of current, voltage, power, energy under different conditions and their determination. They can also gain knowledge about residential wiring, trouble shooting various electrical equipments like ceiling fan, mixer, air conditioner and other electrical gadgets. These experiments help to provide them the foundation they require to be Electrical engineers.

SPORTS

We all need a break from classroom and lectures to rejuvenate and extracurricular activities are the best way to regain that energy and enhance your personality. Whether getting involved in student clubs, volunteering activities, sports tournaments, or part-time job, these activities outside the regular classroom, help students meet new people and develop their social skills. While academics play a significant role, sports-related activities are also important in shaping the personality and character of a student. Students not only stay fit and healthy by actively participating in sports, but they also learn effective ways to handle pressure in times of crisis.

IMPROVES ACADEMIC PERFORMANCE

Studies have revealed that students who are involved in athletic activities achieve better scores through their education. Understanding the correlation between physical fitness and academic success, colleges or university organizes various sports-related programs including badminton, table tennis, basketball, football, etc. for students.

DEVELOPS FITNESS HABITS

Students develop better fitness habits and coordination by engaging in sports and exercises. Proper stretching exercises and yoga from an early age help them in taking care of their bodies while avoiding health problems.



PROVIDES MENTAL AND EMOTIONAL BENEFITS

Not only do sports provide great physical benefits but also help students in boosting and maintaining mental and emotional well-being. When you exercise on a daily basis, your body releases chemicals called endorphins which reduce stress and trigger a positive feeling in the body. It has been proved that students who are physically active and engage in sports are happier and lead a less stressful life.

BUILDS SPECIFIC SKILLS

Through sports, students are able to build a wide range of abilities and skills such as leadership, confidence, teamwork, patience, self-reliance, trust, and many more which facilitate the overall development of an individual. You become proactive when you need to solve problems while playing on the court. Students also learn to manage time between their lectures, sports, and personal life.