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## INSIDE THE ISSUE:

Electrika Celebrations	2
Projects,	3
AEE events	4
Service activities, Student achievements.	5
Staff publications	10
Conferences , workshops	13 6
Placements	68
New Facilities	2

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**BE good**  
**do good**

# SRKR ENGINEERING COLLEGE

(AUTONOMOUS)

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**ELECTRIFYING -2K18**



## MESSAGE FROM CHIEF EDITOR

*Welcome to Electrika, a newsletter for the department of EEE at our reputed Institution SRKREC. This Newsletter Shares the progress in Academic year 2k16-2k17. The information about the events Conducted ,Activities of the Department , Achievements of our faculty and Students are recorded in this issue . Happy Reading!*

## SANKALP-2K17

*It is a national level technical fest conducted by department of EEE and organised by Association of Electrical Engineers (AEE). The Sankalp 2k17 was conducted on 18<sup>TH</sup> and 19<sup>th</sup> December with the theme "RALLEY FOR RIVERS". Fest was inaugurated by D.Ramana (Deputy Director Oil and Natural Gas Agency, Rajahmundry).*

*Sankalp 2k17 comprised of many innovative events - Pragnya(ppt) , Pravyaktha (poster presentation), Srujana(model expo), Yaksha (quiz), Sadhana (short film competition), Inter-state council Mاسترا-( 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 720+ students were Participated.*





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## **ELECTRIFYING 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., September 5<sup>th</sup> 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.



### **ENGINEER'S DAY**

On September 15 AEE celebrated engineer's 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 SEMINARS.





## **PROJECTS**

### ➤ SOLAR BASED CROSS ROADS TRAFFIC CONTROLLER USING SUBWAY SYSTEM

*In the most developed and developing countries cross roads traffic issue is the huge problem, hence to decrease the traffic problems many countries use traffic signaling system which is nothing but a queue line system but it doesn't reduce the traffic density. It just pushes the vehicles into a uniform way by maintaining the delay between them. To eliminate the drawback of the proposed solution uses a sub system along with the traditional traffic signaling system.*



### ➤ HELMET OPERATED SMART E-BIKE

Helmet Operated Smart E Bike is a multi featured E Bike. The motto of proposed method is to provide helmet use as mandatory system while riding their bikes, because everybody neglects to wear and carry the helmets. Hence to avoid the negligence we came up with a solution of safety and security system with helmet use only.

### ➤ SOLAR BASED AUTOMATED IRRIGATION SYSTEM

In recent days, agriculture field farmers are facing many problems in watering their plants to keep their crops green in summer season. It's because they don't have correct idea about the availability of the power. Even if the power is available, they have to wait until the field is properly watered. Thus this process restricts them to stop doing other deeds. But, there is a solution, i.e., automatic solar submersible pump control panel for irrigation.





## EVENTS ORGANISED BY AEE



### **ENOVΛ:**

*This was the first event conducted by AEE in the academic year 2017-2018 on 27<sup>th</sup> June. The Objective of this event is to improve the problem analyzing skills. We have divided the participants into groups which were required to solve a problem when some complicated situations were given. About 65 students from the EEE Department participated in this event and a good feedback was received.*

### **SYNERGY:**

*A quiz competition was conducted on 28<sup>th</sup> Aug 2018 in the areas of software technology, geography, history and science. As a part of this competition, the participants were 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 6<sup>th</sup> July 2017. In this, all career opportunities available after engineering were **discussed** so that they would get an overall view of career paths after engineering.*

**ENTWINE:** *On 4<sup>th</sup> 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 them to tell a story spontaneously by using all the words which were completely out of the box.*

## 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 27<sup>th</sup> 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 28<sup>th</sup> and 29<sup>th</sup> of Dec-2017.*
- *K. Anitha 3/4 EEE, won 1<sup>st</sup> place in shot-put in the internal sports day competitions 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 27<sup>th</sup> Jan-2018.*



## STAFF PUBLICATIONS

- P.KANTA RAO,"COMPARISON of voltage stability and loss reduction by using model analysis and sensitivity methods " ,International Journal of Electrical Engineering VOLUME-15,ISSUE-1,PAGES-1-6,2016.
- G.D.K PRASAD , "Amind operated computer mouse using Discrete wavelet Transforms for Elderly people with Multiple Disabilities " ,International Journal of ELSEVIER. VOLUME-10,ISSUE-13,PAGES :166-175.
- Pothula Jagadeesh ,B.S.S.Santosh ,D.A.K.Rao,S.Rajasekhar Reddy,B.Mothiram",Instantaneous Reactive Power Control of Non – Linear Loads",International Journal of Chemical and Pharmaceutical Sciences .Special Issue-10,PAGE:34-37,ISSN :0947-2115.
- P.Bhavya ,sk.Nazeer and A kumar raja " ,A Comparative Assessment on Fault Location Methods Using Travelling Wave Theory " ,International Journal of Engineering Sciences and Computing .VOLUME-6,ISSUE-12,PAGE:3856-3863.
- Sudashi Rohan Abinay,K.S.S.Prasad Raju , "Application of Fuzzy Based UPQC for Quality Enhancement with Minimum VA Rating " , International Journal & Magazine of Engineering Technology ,Management and Research .VOLUME-03,ISSUE-08,PAGE:436-440.
- K.SWETHA ,M.SURYA PRASAD " ,Load Frequency Control of Two Area Hydro-Hydro System using SMES-SMES,TCPS-SMES& SSSC-SMES Controllers in Automatic Generation control" , International Journal of Recent Trends in Engineering and Research.VOLUME-2,ISSUE-11,PAGE:14- 21.
- G.Veeranna " ,Design and Comparison of PI and Fuzzy Controller for UPQC with Power Quality , " International Journal of Innovative Research and Studies .VOLUME-2,ISSUE-12,PAGE:301-311.
- K.Kirankumar ,M.manaswi,"Low Frequency HVAC Transmission System for Wind Power Systems " ,International Journal of Research in Science and Technology .VOLUME-2,ISSUE-1,PAGE:16-22.
- CH.DURGA PRASAD, G.PAVAN KUMAR," Frequency Control of Hybrid Power Systems with Wind Energy in Presence of Classical Swarm Optimization Tuned PI Controller " ,International Journal on Instrumentation and Control Engineering .VOLUME-4,ISSUE-4,PAGES:16-22.
- Dr. M.SAI VEERRAJU ,P.SURESH KUMAR , "Load Frequency Control of Multi Area Power System Using Fuzzy logic and Optimal Control Technologies " ,International Journal on Recent Trends in Engineering and Research .VOLUME-2,ISSUE-8,PAGE:163-172.



## **CONFERENCES**

- Varma RK bhupathiraju, KUMARRAJA ANDANAPALLI, B.K CHAITANYA ,ANAMIKA Yadav, A comparative study of different signal processing techniques for fault location on transmission lines using Hybrid Generalized Regression Neural Network “,International Conference on Signal Processing Communication ,Power and Embedded System (SCOPES) PAGES-1246-1250,2016.
- P.KANTA RAO, “Enhancement of voltage stability with VSC-OF including wind farms based on PSO”, National Conference on recent advances in Power Electronics-2016
- BHAVANI KATHULA ,B.R.K.VARMA , “ANN based fault Classification and Fault location for Double Circuit Transmission Lines “, 1<sup>st</sup> International Conference on GREEN POWER TECHNOLOGY IN POWER GRID: ISSUES, CHALLENGES & CONTROL (GPTPG-2016).
- G.D.K .PRASAD, “Voice Command Page Turning Robot for Physically Challenged People”, International ICEMRCI Journal .PAGE:1-8.
- Pothula Jagadeesh ,dr m.Saiveerraju , “Particle Swarm Optimization based Power System Stabilizer for SMIB system “, International IEEE Sponsored ICETETS-2016.
- V.srinivas ,N.SIVASANKAR , “Excitation System Control of Synchronous Generator Using PID & Fuzzy Tuned PID Control “, National Conference on Recent Advances in Power Electronics ,Power and Control Systems -2016.
- B.SUBRAMANYAM ,A.Kumarraja , “A Conventional Facts device Based on Dual Angle Control Under System Faults “, Recent Advances in Power Electronics ,Power and Control Systems Engineering “ PAGES:1-8,2016.
- A.kumar Raja ,Pothula Jagadeesh ,sk,nazeer and Suresh Etukuri “, DWT based Symmetrical Detection Method During Power Swing “, International Conference on Circuits Power And Computing Technologies. PAGE:1-5,2016.
- M.pavani, Iswetha Monica “, A fuzzy Based SFCL for Fault Current limiting in Distribution Systems “, national conference of Recent Advances in Power Electronics ,Power and Control Systems Engineering PAGE:18-24, 2016.
- NVA BHAVANI ,I.SWETHA MONICA, “Power Quality Improvement in Battery Integrated wind Energy System “, International conference of ICEMRCI-2016.
- K.SWETHA, DR.D.VIJAYA KUMAR ,DR.V.S .Vakula , “Modelling of PID controller for AGC of a multi Area power system with thyristor Controlled Series Controller”, International Conference on Emerging Multi Disciplinary Research and Computational Intelligence -2016.
- B.Mothi ram ,G.veeranna, k.Kiran kumar ,CH.B.L.Navasri, “Voltage Unbalance and Harmonic Compensation for Islanded Droop Controlled Microgrid Inverters “, International Conference on Emerging Multi Disciplinary Research and Computational Intelligence on 15<sup>th</sup> DEC & 16<sup>th</sup> 2016.
- K.kiran kumar ,G.veeranna ,B.Mothi ram , “AT-Connected Transformer and a three leg VSC with Fuzzy Based DSTATCOM for Power Quality Improvement “, International Conference on Emerging Multi Disciplinary Research and Computational Intelligence on 15<sup>th</sup> DEC & 16<sup>th</sup> 2016

## **WORKSHOPS**

- CH.DURGA PRASAD, A.kumarraja Attended a Workshop on International Advanced Computing Conference on “Outcome Based Education and Accreditation in S.R.K.R Engineering College during 26<sup>th</sup> Feb-2016.
- Pothula Jagadeesh ,SK NAZEER ,D.Bhanu Chandar ,K.S.S.Prasad Raju Attended a workshop on Research Avenues & Emerging Trends In Electrical Engineering in S.R.K.R. Engineering college On 26<sup>th</sup> –FEB 2016 .
- Pothula Jagadeesh ,D.Anantha koteswara Rao ,D.Bhanu Chandar Attended a workshop on Evaluation of Land and Water Management Systems of West Godavari District in S.R.K.R. Engineering college during 27<sup>th</sup> OCT to 28<sup>th</sup> OCT 2016 .
- D.bhanu Chandar ,K.S.S. PRASAD RAJU Attended a workshop on Research Avenues & Emerging Trends In Electrical Engineering in J.N.T.U Kakinada During 16<sup>th</sup> May 2016 to 30<sup>th</sup> May 2016 .
- K.S.S.Prasad raju Attended a workshop on APPLICATION OF power Electronics to Renewable Energy in NIT ,GOA .During 12<sup>th</sup> May to 14<sup>th</sup> May 2016.
- K.SWETHA attended a workshop on Research methodologies in J.N.T.U.Kakinada during 1<sup>st</sup> May to 15<sup>th</sup> May 2016.

## **PLACEMENTS**

<b>S.R.K.R. ENGINEERING COLLEGE</b>			
<b>EEE DEPARTMENT</b>			
<b>2017-2018</b>			
<b>S.NO</b>	<b>NAME OF THE COMPANY</b>	<b>COURSE</b>	<b>NO OF STUDENTS SELECTED</b>
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, YASWANTH 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-



## 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

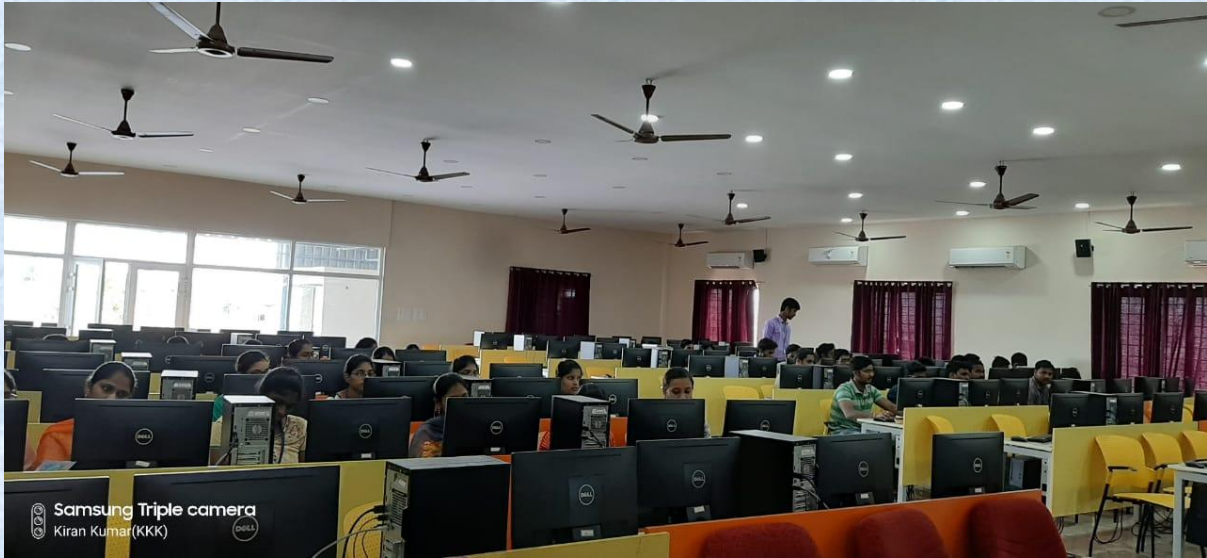


*It is one of the major facility to provide in our college by motivating the students how to reduce the faults in the time of generation, transmission and distribution of power. The equipments used in this labaratory are modern equipment which is very beneficial for students in order to capable of improving their pratical knowledge. The power packed EEE department inspires the budding electrical engineers with the potent idea of the constructing this power protection labaratory in the year 2k17.*

### DIGITAL LEARNING LAB

*Although technology is critical to multimedia work, this labaratory distinguish and providing a key strength for electrical engineers. This labaratory 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.*