

# Department of Electrical & Electronics Engineering KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE WARANGAL - 506 015



(An Autonomous Institute under Kakatiya University, Warangal)

# NEWS LETTER

## **VOLUME - VI, ISSUE - I**

#### JANUARY 22<sup>nd</sup>, 2020

CHIEF EDITOR Prof. C. VENKATESH Head of the Department

EDITOR IN-CHARGE M. SANTHOSH, Assistant Professor K. SRINIVAS, Assistant Professor

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#### CHIEF EDITORIAL MESSAGE

With great pleasure and honour, I write this foreword. Indeed, this newsletter has a lot to look forward. I am happy that our department started in the year 1994 with B.Tech-EEE programme has completed 25 years and is now celebrating Silver Jubilee year. During these 25 years EEE department has crossed several milestones and contributed to society in the form of education to engineering students.



 Prof. C. VENKATESH Professor & Head, EEE

Department of EEE, started with B.Tech - EEE in 1994 with an intake of 60 later enhanced to an intake of 120 in the year 2012. PG programme of M.Tech-Power Electronics was started in the year 2013. B.Tech-EEE program has been accredited by NBA two times under Tier-II for the period 2011-14 and 2016-19. I am glad to inform that now B.Tech-EEE program has been accredited by NBA under Tier-I for three years from 1st July 2019.

Department of EEE has been strengthened in terms of quality equipments in the laboratories and trained staff. With the suggestions from BoS members consisting of experts from reputed Institutions like NIT and from industries, EEE Department has successfully implementing curriculum for the first autonomous batch from A.Y. 2014-15 for both UG & PG programmes (URR-14 & PRR-14). Laboratories were upgraded to meet the curriculum requirement. New laboratory - Electrical Drives Lab, Power Electronics Simulation Lab & Renewable Energy Systems Lab are setup for M.Tech-Power Electronics recently. Further, second curriculum revision was taken up and B.Tech-EEE curriculum URR-18 is introduced from A.Y. 2018-19. In this line, Basic Electrical Engineering Laboratory has been setup to cater facility for all programmes of B.Tech I-year.

The department has conducted several FDPs and workshops for the faculty during these years. Every year we have conducted National level Technical Symposium-**SUMSHODHINI** and Cultural Fest-**SANSKRITI**. **These achievements are possible with able leadership by the Heads of the Department during these 25 years of journey** - *Prof. P.S. Sarma, Prof. P. Venugopal Rao, Prof. G. Ravi Kumar and Prof. V. Ramaiah.* 

Faculty have contributed whole heartedly for the growth of the Department. The Department has also witnessed the strong force of faculty. At present the Department has faculty strength of 29 with diversity of specialization, out of which 10 of them have Doctorates, 10 are pursuing PhD and 09 are with M.Tech. Alumni are the main pillar for the growth of the Department. I would like to offer my sincere thanks to all the Alumni for their support in guiding the students through invited lectures, supporting for internships and industry visits. Suggestions from stakeholders have added value during the reforms taken time to time.

This newsletter stands special with events of Silver Jubilee Academic year (Odd Sem). I would like to offer a word of thanks to our readers, our contributors, and our editorial board for their support in bringing out this Newsletter. This newsletter will provide a glimpse of faculty and student achievements in odd semester of academic year 2019-2020.

#### VISION AND MISSION OF THE DEPARTMENT :

#### **VISION**:

• To fulfil the needs of the industry and society through excellence in education and research in electrical engineering.

#### **MISSION**:

- To produce globally competent engineers in Electrical & Electronics Engineering.
- To promote scientific inclination and cultivate professional ethics.
- To serve organization and society as adaptable engineers, entrepreneurs or leaders.

# **B.Tech - Electrical & Electronics Engineering**

### **Program Educational Objectives (PEOs):**

- POE1 Choose their careers as practicing engineers ready for modern electrical power and energy industry.
- POE2 Engage in lifelong learning, career enhancement and adapt to changing professional and societal needs.
- POE3 To produce graduates with perspective for environmental issues by building the awareness of green and sustainable energy technologies.
- POE4 To produce graduates with problem solving culture through familiarization with the state-of-art facilities in Electrical and Electronics Engineering laboratories.

#### Program Outcomes (POs): Engineering Graduates will be able to

- **PO1** Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- Problem analysis: Identify, formulate, review research PO2 literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO3 Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- PO4 Conduct investigations of complex problems: Use researchbased knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- PO5 Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- **PO6** The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- Environment and Sustainability: Understand the impact PO7 of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **PO8** Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9 Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10 Communication: communicate effectively on

complex engineering activities with the 🚬 🚥

engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

- PO11 Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- PO12 Lifelong Learning: recognise the need for and have the preparation and ability to engage in independent and life long learning in the broadest context of technological change.

#### Program Specific Outcomes (PSOs):

- PSO1 The Electrical and Electronics Engineering graduates are capable of applying the knowledge of mathematics and sciences in modern power industry.
- PSO2 Analyse and design efficient systems to generate, transmit, distribute and utilize electrical energy to meet social needs using power electronic systems.
- PSO3 Electrical Engineers are capable to apply principles of management and economics for providing better services to the society with the technical advancements in renewable and sustainable energy integration.
- PSO4 Practice professional ethics and work in a team and communicate to keep abreast of latest developments to achieve project objectives for the betterment of the society.

**Department of Electrical & Electronics Engineering got** accreditation by National Board of accreditation (NBA) under Tier-I for 3 years w.e.f. 01-07-2019

#### EEE ASSOCIATION DETAILS:

- 1. President: K. Sai Charan (IV/IV, B. Tech)
- 2. Vice President: S. Sravya Reddy (IV/IV, B. Tech)
- 3. Vice President: G. Shiva Krishna (IV/IV, B. Tech)
- 4. Chief Secretary: Md. Nehaz Hussain (IV/IV, B. Tech)
- 5. Chief Secretary: P. Ranjith Kumar (IV/IV, B. Tech)
- 6. Joint Secretary: **R. Anudeep** (III/IV, B. Tech)
- 7. Joint Secretary: D. Sravan Kumar (III/IV, B. Tech)
- 8. Event Managers: Nithin, Srinith, Krishna Prasad and K. Harshitha

#### **Student Activities:**

Date

#### Name of the EventIT'S TIME TO TALK

05/10/2019

Description This activity is organized to improve analytic, creative & spontaneity skills of the students. The student can also learn to act accordingly to the given problem statement/situation. The itinerary of the activity proceeds as follows: All the students are divided into four groups & a problem statement, clip related



to that particular problem statement is played. The participants have to discuss among their groups to analyse the problem & should come up with respective feasible solutions. The best technical solution which is precise, logical & analytical will be awarded.

**Response** The response from the Students was good and total number of 51 members of which 34 Students from 2<sup>nd</sup> year, 08 Students from 3<sup>rd</sup> year & 08 members from 4<sup>th</sup> year have participated in the event and took active participation. The main objective of organizing the activity of improving Analytic, Creative & Spontaneity in answering/finding solution for questionnaire/problem statement was satisfactorily fulfilled

### Organizing Team 1. R ANUDEEP (Joint Secretary)

- 2. D SRAVAN KUMAR (Joint Secretary)
- 3. S SRINITH (Event Manager)
- 4. K VARENYA (Spokes Person)
- 5. B RAGHU (Executive Member)
- 6. P NIKHIL (Executive Member)

#### **Student Activities:**





#### SUMSHODHINI 2019 (24<sup>th</sup> & 26<sup>th</sup> Oct, 2019):

SUMSHIDHINI 2019, the 3-day technical event conducted in our college has been an excellent platform for all the eager tech aspirants for showing out their inner talent and passion towards their respective engineering subject. The department of Electrical and Electronics Engineering has conducted various programs or events for the students and has given good knowledge and a great experience to those who have participated in them. The main attraction of all was "Energy conservation in smart cities" workshop which has been both fun and educational for those who have participated. Students who participated in the workshop gained knowledge on how to work with Arduino and other electronic modules. Along with this, six events such as paper presentation, project presentation, poster presentation, and electrical expo events were conducted which helped the students to present their ideas and their prototypes. Also, other fun events such as PHASOR, and ELECTRIC ELITE have provided a joyous experience for everyone overall SUMSHODHINI 2019 has been a blast. The best performers in each event were rewarded for their efforts and hard work. The event would not have been successful without the support of department faculty members, staff and students who have helped in organising it.

EVENT	NUMBER OF PARTICIPANTS
Workshop on Energy conservation in smart cities	105
Paper Presentation	33
Project Presentation	36
Poster Presentation	21
Electrical Expo	30
Phasor	60
Electric Elite	88



Group Photo with HOD of EEED Faculty members and workshop Team during SUMSHODHINI'19



Workshop participants during SUMSHODHINI'19





Faculty Coordinators with participants at Paper Presentation during SUMSHODHINI'19



Faculty visit during Project Presentation event during SUMSHODHINI'19



Distribution of certificates the project presentation winners during SUMSHODHINI'19



Faculty visit during Poster presentation event during SUMSHODHINI'19







Certificate ceremony for the winners during SUMSHODHINI'19

# Silver Jubilee Logo Contest

On the eve of completing 25 years of existence of EEE Department, LOGO DESIGN CONTEST was conducted. Many of the students have participated in this design contest. The logo designed by Mr. D. Sravan Kumar of B.Tech VI Sem EEE has been selected as Silver Jubilee Logo.

## **Release of Silver Jubilee Logo**



#### **DESCRIPTION OF THE LOGO**

- The components on the left side are Electrical and whereas, • on the left side all components placed are Electronic.
- At the centre, there is a bulb which shows that it is Electrical earlier & Electronic Component in recent days.
- At the Center there is an emerging electric vehicle with solar panel @ top, hub motors as wheels, charging ways with inductive and conventional, thyristor bridge banks, a transformer, CPU, two batteries.
- The numbers 2 and 5 are red and black in colour which simultaneously indicates the 25 years of EEE terminals of Battery +ve & -ve.
- WiFi symbol @ back of EV shows the V2G (Vehicle to Grid) ٠ connection.
- · Hence this logo justifies the name & present trends of **ELECTRICAL & ELECTRONICS ENGINEERING**







# ADVANCED EQUIPMENT ADDED IN THE DEPARTMENT LABORATORIES





# **Faculty Contributions**

Details of STTPs/ FDPs/	Workshops attended by	v the faculty during Jul	v - December2019
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S. No	Name of the Faculty	STTP/FDP/ workshop # /others	<b>Details</b> @	Details@ Venue	
		8-weeks MOOCs	Accreditation and Outcome Based	NPTEL – AICTE FDP	8 weeks
1	Prof. C. Venkatesh	course	L earning	online – conducted by IIT,	$\Delta ug = Oct 2019$
		(1- week FDP)	Eleanning	Kharagpur	Aug. 000.2019
2	Prof. C. Venkatesh	Conference	EDU Summit – Reimagining the Future of Higher Education sponsored by CII and TSCHE	Hyderabad	1-day 15 <sup>th</sup> Nov. 2019
3	Prof. C. Venkatesh	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{th}} - 14^{\text{th}}$ December, 2019
		One Week Faculty	Recent Research Directions and Key	Department of Electrical	One week & from $2^{nd} - 6^{th}$
4	Prof. V. Ramaiah	Development Program (FDP)	Concepts in Electrical Engineering Engineering , Delhi Technical University		December, 2019
5	Prof. V. Ramaiah	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{th}} - 14^{\text{th}}$ December, 2019
6	Prof. V. Rajagopal	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{th}} - 14^{\text{th}}$ December, 2019
7	M. Narasimha Rao	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{th}} - 14^{\text{th}}$ December, 2019
8	G. Rajender	One week FDP	RAEE-2019	KITS Warangal	9 <sup>th</sup> – 14 <sup>th</sup> December, 2019
9	B. Jagadish Kumar	STTP	AICTE sponsored STTP on Recent Trends	SR Engineering college	One week from $2^{nu} - 7^{un}$
10	D L PLV	0 1 500	in Protection of Power Systems	Warangal	December, 2019
10	B. Jagadish Kumar	One week FDP	RAEE-2019	KIIS warangal	9 <sup></sup> – 14 <sup></sup> December, 2019
11	Dr G. Kajender	Two Week FDP	DST Sponsored FDP on Machine	KITS Warangal	I wo week
	Dr G Rojender		Learning in Speech Processing		11-22 November, 2019
12	Naik	One week FDP	RAEE-2019	KITS Warangal	9 <sup>th</sup> – 14 <sup>th</sup> December, 2019
13	Dr. G. Sudheer Kumar	One week FDP	RAEE-2019	KITS Warangal	9 <sup>th</sup> – 14 <sup>th</sup> December, 2019
14	Dr. B. Vijay Kumar	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{th}} - 14^{\text{th}}$ December, 2019
	P. Nagariuna	8-weeks MOOCs			
15	r. Nagarjuna Reddy	course	TALE-2	SWAYAM NPTEL	8 weeks, July – Sep, 2019
	(1-week FDP)				
16	P. Nagarjuna	NPTEL-AICTE	DOMonorida	Massive Open Online	9 1 I1
16	Reddy	(1-week FDP)	DC Microgrids	Course (MOOCs) organized	8 weeks, July – Sep, 2019
	P. Nagariuna	NDTEL AICTE		Massive Open Opline	12 weeks July Nov
17	Reddy	FDP (11/2 week FDP)	Power System Analysis	Course (MOOCs)	$\frac{12}{2019} = 100^{\circ},$
18	P. Nagarjuna Reddy	One week FDP	RAEE-2019	KITS Warangal	9 <sup>th</sup> – 14 <sup>th</sup> December, 2019
19	C. Pavan kumar	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{th}} - 14^{\text{th}}$ December, 2019
20	K.Ajith	NPTEL-AICTE FDP	DC Microgrids	Massive Open Online Course (MOOCs) organized	8 weeks, July – Sep, 2019
21	V Alith	One week EDD	DAEE 2010	by III-Roorkee	0 <sup>th</sup> 14 <sup>th</sup> December 2010
21	K.Ajiui		KAEE-2019	Massive Open Opline	9 – 14 December, 2019
22	T. Praveen Kumar	NPTEL-AICTE (1-week FDP)	DC Microgrids	Course (MOOCs) organized by IIT-Roorkee	8 weeks, July – Sep, 2019
23	T Praveen Kumar	NPTEL-AICTE	Power System Analysis	Massive Open Online	12 weeks, July – Nov,
		(11/2 week FDP)		Course (MOOCs)	2019
24	T. Praveen Kumar	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{m}} - 14^{\text{m}}$ December, 2019
25	Dr. Y. Manju Sree	One week FDP	RAEE-2019	KIIS Warangal	9 <sup>44</sup> – 14 <sup>44</sup> December, 2019
26	Chandra	One week FDP	RAEE-2019	KITS Warangal	9 <sup>th</sup> – 14 <sup>th</sup> December, 2019
27	Dr. A. Madhukar Rao	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{th}} - 14^{\text{th}}$ December, 2019
28	Dr. A. Rajasekhar	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{th}} - 14^{\text{th}}$ December, 2019
29	M. Santhosh	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{th}} - 14^{\text{th}}$ December, 2019
30	G. Sunil Kumar	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{th}} - 14^{\text{th}}$ December, 2019
31	M. Srinivas	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{th}} - 14^{\text{th}}$ December, 2019
32	V.Srinivas	8-weeks MOOCs course (1-week FDP)	Fundamentals of Electric Drives	SWAYAM NPTEL	08 Weeks, July-Sep, 2019
33	V.Srinivas	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{th}} - 14^{\text{th}}$ December, 2019
34	V. Prakash	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{th}} - 14^{\text{th}}$ December, 2019
35	B. Reshma	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{in}} - 14^{\text{in}}$ December, 2019
36	K.Srinivas	One week FDP	RAEE-2019	KITS Warangal	9 <sup>th</sup> – 14 <sup>th</sup> December, 2019
37	P.Mahesh	8-weeks MOOCs	Fundamentals of Electrical Drives	SWAYAM -NPTEL,	July-September, 2019
20	D.M.11	course (1-week FDP)		III MADRAS.	oth 14th December 2010
38	r.Manesh	One week FDP	KAEE-2019	KIIS warangal	9 – 14 December, 2019
39	M. Spandana	STTP	and MATLAB Programming for	CBIT, Hyderabad	25 <sup>th</sup> - 30 <sup>th</sup> November, 2019
40	M. Spandana	One week FDP	RAEE-2019	KITS Warangal	$9^{\text{th}} - 14^{\text{th}}$ December, 2019



# Conferences attended by the faculty for presenting research papers, during July - December 2019

S. No	Name of the Faculty	Details of conference where papers were presented	Venue	Dates of the conference	Title of the paper presented, including page numbers
1	Prof. V. Ramaiah	4th International Conference On Innovation in Electrical Engineering (ICIEEE-2019), GNIT	Hyderabad	26-27 <sup>th</sup> July, 2019	Overview of Restructured Power System
2.	Prof. V. Ramaiah	International Conference on Power Electronics Applications and Technology in Present Energy Scenario (IEEE PETPES-2019)	NIT Surathkal, Karnataka	29-31 Aug 2019	Seven Level Fault Tolerant Inverter for Photovoltaic Applications
3.	M. Narasimha Rao	4th International Conference On Innovation in Electrical Engineering (ICIEEE-2019), GNIT	Hyderabad	26-27 <sup>th</sup> July, 2019	Single Phase Solar system with cascaded H-Bridge inverter in standalone mode
4.	B. Jagadish Kumar	XVII International Conference on Recent trends in Engineering, Science and Management	Mahratta Chamber of Commerce, Industries and Agriculture Tilak Road, Pune	28 <sup>th</sup> July 2019	Improve power quality of Grid connected PV system with PI controller
5	B. Jagadish Kumar	Tenth International Conference on Advances in Computing, Control and Telecommunication Technologies, ACT-2019	Hyderabad	July 25-29	Modeling and simulation of a Novel Multilevel DC-AC Inverter
6	B. Jagadish Kumar	International Journal of Scientific Research and Review	-	Vol7, Issue-7, July 2019	Improve power quality of Grid connected PV system with PI controller
7	Dr. G Sudheer Kumar	National Conference On Nano/Bio- Technology 2019	JNU, New Delhi	19-21 <sup>st</sup> December, 2019	Electrical conductivity, dielectric and mechanical sensing properties of PVDF- CNT nano composites
8	Dr.A.Madhukar Rao	International Conference on Power Electronics Applications and Technology in Present Energy Scenario (IEEE PETPES-2019)	NIT Surathkal, Karnataka	29-31 Aug., 2019	Seven Level Fault Tolerant Inverter for Photovoltaic Applications
9	C. Pavan kumar	4th International Conference On Innovation in Electrical Engineering (ICIEEE-2019), GNIT	Hyderabad	26-27 <sup>th</sup> July, 2019	Single Phase Solar system with cascaded H-Bridge inverter in standalone mode
10	C. Pavan kumar	4th International Conference On Innovation in Electrical Engineering (ICIEEE-2019), GNIT	Hyderabad	26-27 <sup>th</sup> July, 2019	Overview of Restructured Power System
11	V.Prakash	4th International Conference On Innovation in Electrical Engineering (ICIEEE-2019), GNIT	Hyderabad	26-27 <sup>th</sup> July, 2019	Single Phase Solar system with cascaded H-Bridge inverter in standalone mode
12	V.Prakash	4th International Conference On Innovation in Electrical Engineering (ICIEEE-2019), GNIT	Hyderabad	26-27 <sup>th</sup> July, 2019	Overview of Restructured Power System
13	V.Srinivas	Power Electronics Applications and Technology in Present Energy Scenario(PETPES-2019)	NITK, SURTHKAL	29 <sup>th</sup> -31 <sup>st</sup> AUG, 2019.	Seven level fault tolerant inverter for PhotoVoltaic applications
14	V.Srinivas	International conference on Power Systems (ICPS-2019)	MNIT, JAIPUR	20 <sup>th</sup> -22 <sup>nd</sup> DECEMBER, 2019	Multilevel Inverter Topology with Symmetrical and Asymmetrical Sources for Distributed Energy Resources

# Details of FDPs/ STTPs / Workshops/ Conferences organized by the Department during July - December 2019



S.No	Organized STTP/ FDP/ Workshop/ Conference	Title of STTP/ FDP/ Workshop/ Conference	Duration & Dates	<b>Convenors &amp; Coordinators</b>	No. of participants
1	FDP	ISTE sponsored-Recent Advances in electrical Engineering-2019 (RAEE2019)	1-week, 9 <sup>th</sup> to 14 <sup>th</sup> Dec. 2019	<u>Convenors:</u> Prof. C. Venkatesh Prof. V. Ramaiah <u>Coordinators:</u> Dr. V. Rajagopal Dr. D. Rakesh Chandra	48
2	Workshop	Power Electronics & Drives in association with IQAC, KITSW	2-days, 18 <sup>th</sup> & 19 <sup>th</sup> Dec. 2019	<u>Convenor:</u> Prof. C. Venkatesh <u>Coordinators:</u> Sri B. Jagadish Kumar Dr. A. Madhukar Rao	08

# Details of expert lectures delivered by the faculty inside & outside the institution during July - December2019

S.No	Name of the faculty	Expert lecture delivered	Dates	Venue
1	Dr. C. Venkatesh	Quality Metrics for Outcome Based Education	15.07.2019	Kamala Institute of Technology and Science, Singapur
2	Dr. C. Venkatesh	Multilevel Inverters for Solar PV Systems during ISTE sponsored-Recent Advances in electrical Engineering-2019 (RAEE2019)	10.12.2019	EEE Dept., KITSW
3	Dr. V. Rajagopal	Power Quality Issues in Solar Interconnection to grid	10.12.2019	EEE Dept., KITSW
4	Prof. V. Ramaiah	Electric Power Distribution issues and challenges in India	13.12.2019	EEE Dept., KITSW
5	Prof. V. Ramaiah	Intellectual Property Rights & Patents	15.12.2019	Dept. of Education, University of Delhi
6	B. Jagadish Kumar	Power Electronics converters	18.12.2019	EEE Dept., KITSW
7	Dr. G. Sudheer Kumar	Nano-technology applications to Electrical Engineering	12.12.019	EEE Dept., KITSW
8	Dr. A. Madhukar Rao	Energy Balancing and fault Tolerance ability of DC – AC converters	14.12.19	EEE Dept., KITSW

# Faculty visits to Industries during July - December 2019

S.No	Name of the faculty	Visited Industry & location #	Dates	Details including purpose
1	Dr. C. Venkatesh	Central Power research Institute (CPRI), Hyderabad	28.11.2019	Project work and internship for M.Tech students
2	Dr. C. Venkatesh	BHEL, R&D Centre, Hyderabad	28.11.2019	Project work and internship for M.Tech students
3	Dr. C. Venkatesh	L&T Metro, Hyderabad	28.11.2019	Industry visit to B.Tech EEE students
4	Dr. C. Venkatesh	MSME & CITD, Hyderabad	28.11.2019	Internship and Project work for B.Tech EEE students
5	Dr. C. Venkatesh	TSNPDCL, Warangal	12.11.2019	Interacted with the CMD of TSNPDCL to establish strong foundation to bridge the gap between academia and industry
6	Prof. V. Ramaiah	Central Power research Institute (CPRI), Hyderabad	28.11.2019	Project work and internship for M.Tech students
7	Prof. V. Ramaiah	BHEL, R&D Centre, Hyderabad	28.11.2019	Project work and internship for M.Tech students
8	Prof. V. Ramaiah	L&T Metro, Hyderabad	28.11.2019	Industry visit to B.Tech EEE students
9	Prof. V. Ramaiah	MSME & CITD, Hyderabad	28.11.2019	Internship and Project work for B.Tech EEE students
10	Prof. V. Ramaiah	TSNPDCL, Warangal	12.11.2019	Interacted with the CMD of TSNPDCL to establish strong foundation to bridge the gap between academia and industry
11	Prof. V. Rajagopal	TSNPDCL, Warangal	12.11.2019	Interacted with the CMD of TSNPDCL to establish strong foundation to bridge the gap between academia and industry



# Details of New laboratories established during July - December 2019

S.No	Name of the New laboratory	B.Tech/ M.Tech	Details of the equipment added	Make & specifications	Cost (Rs in lakhs)
1	Basic Electrical Engineering lab	B.Tech	Regulated Power Supplies, 1-Ph transformers, 1-Ph Auto- transformer, 3-Ph Auto-transformer, Function Generators, 4 digit DMMs, Measuring Instruments	MECO, Scientech, Devi Electronics	4,83,505/-

# Projects applied for getting Funding AICTE/DST/UGC/others

S.No	Scheme	Title of the project	Applied to ( <i>Funding Agency</i> )	Funding Amount (Rs. in lakhs)	Coordinator
1.	AICTE – STTP (AQIS-2019)	Electric Vehicle Battery Charging System with Renewable Energy Sources	AICTE (AQIS Application ID (2019-20): 1-7088367481, dt. 29.12.2019)	5.00	Prof. C. Venkatesh
2	AICTE (AQIS-2019)	Skill and Personality Development Centre for SC/ST	AICTE (AQIS Application ID (2019-20): 1-7074330181, dt. 28.12.2019)	25.00	Dr. G. Sudheer Kumar

# Details of Workshops/training attended by the non-teaching faculty during July - December 2019

S.No	Name of the Staff	Workshops/ training /others	<b>Details</b> @	Venue	Duration & Dates
1	Sri P. Sammaiah	Two day workshop	Power Electronics and Drives	EEE Dept., KITSW	2-days 18-19 December 2019
2	Sri M. Sridhar	Two day workshop	Power Electronics and Drives	EEE Dept., KITSW	2-days 18-19 December 2019
3	Sri G. Chandramouli	Two day workshop	Power Electronics and Drives	EEE Dept., KITSW	2-days 18-19 December 2019
4	Sri B. Kamalakar	Two day workshop	Power Electronics and Drives	EEE Dept., KITSW	2-days 18-19 December 2019
5	Sri M. Vikram	Two day workshop	Power Electronics and Drives	EEE Dept., KITSW	2-days 18-19 December 2019

#### RECENT ADVANCES IN ELECTRICAL ENGINEERING-2019 (December 9<sup>th</sup> - 14<sup>th</sup>, 2019)

This One Week Faculty Development Program is organized by Electrical & Electronics Engineering department, KITSW during 9<sup>th</sup> to 14<sup>th</sup> December, 2019. For this workshop conveners are Prof. C. Venkatesh, Prof. V. Ramaiah and Coordinators are Prof. V. Rajagopal, Dr. D. Rakesh Chandra.

#### **About the FDP**

Electrical energy generation from renewable energy sources such as solar and wind are widely adopted in order to meet increase in electricity consumption. The integration of renewable energy sources with the grid plays an important role in energy utilization. It is difficult to utilize electricity from renewable energy sources directly. Hence the system needs power electronic converters as an interface between renewable energy sources and grid/load.

Multilevel inverters are the preferred choice of industry for the application in high voltage and for high power application. Multilevel inverter technology has emerged recently as a very important alternative in the area of high-power medium-voltage energy control.

There are challenges in interconnection of solar PV system to grid. The main technical challenge of solar PV system connected to grid is its effect on power quality which include harmonics, voltage fluctuation, low power factor, reactive power and load management etc.

The studies for hybrid electrical vehicle (HEV) have attracted considerable attention because of the necessity of developing alternative methods to generate energy for vehicles due to limited fuel based energy. HEV incorporates internal combustion engine, electric machines and power electronic equipment. The intensive design idea in traditional substation, switch station and other places has gained popularity and the promotion.

Optimization techniques are essential in the planning of large electrical systems, optimization of power flows, and a wide variety of other electrical engineering problems.



Prof. D. M. Vinod Kumar, NITW delivering the Key Note address on 9.12.2019



Dr. Y. Chandrashekar, Asst. Prof., NITW delivering lecture on "Optimal Design of Electric Vehicle Charging Stations" on 9.12.2019



Sri Pavan Fakatkar while delivering "the Programming Low Cost Hardware board using MATLAB Software" Lecture



Dr. T. Vinay Kumar, Asst. Prof., NITW while delivering talk on "Application of Electrical Drives in Electrical Vehicles"



Sri G. Rajendar, KITSW while explaining roof top solar PV system

Certificate distribution during Valedictory Function of FDP, 14<sup>th</sup> Dec. 2019









Industry Visits by Faculty Members:



Faculty team members interacting with Dr. Pradeep, Unit Head, UHV Laboratory, CPRI-Hyderabad and Sri Devender Rao, Joint Director, CPRI-Hyderabad, 28.11.2019



The faculty team members with Sri Rajesh Kumar Yadav, Head, MSME - Development Institute-Hyderabad and his team members, 28.11.2019



Prof. V. Ramaiah was attended Two Days National Level Seminar on Smart Grid and Smart Cities and interacted with the Technical Director of Inesh Smart Energy private limited, Chennai during 28-29 of August 2019



Prof. V. Ramaiah interacted with Sri Umakanta Panda, Commission Secretary of TSERC, Hyderabad as part of Industry Institute Interaction and Research activity during December, 2019

#### STUDENT ACHIEVEMENTS Placements ongoing for 2016-2020 batch

S.No.	Name of the student	Roll No.	Selected for company
1	Shyamala Krishna Prasad	B16EE010	Mphasis
2	Mohammed Nehaz Hussain	B16EE033	Mphasis
3	Rayabarapu Maniteja	B16EE048	Mphasis
4	Gaddameedi Bharath	B16EE058	Mphasis
5	Sama Shravya Reddy	B16EE078	Mphasis
6	Ravula Vyshnavi	B16EE087	Mphasis
7	K.Sannihitha	B16EE090	Mphasis
8	Sheelam Navya Rani	B16EE112	Mphasis
9	Nowsheen Tabassum	B16EE002	TCS-Ninja
10	Ramagoni Vishnu Teja	B16EE012	TCS-Ninja
11	Kusampally Sahithi	B16EE013	TCS-Ninja
12	Mula Dharani Sai	B16EE016	TCS-Ninja
13	Arutla Srikar	B16EE021	TCS-Ninja
14	Mohammed Nehaz Hussain	B16EE033	TCS-Ninja
15	Kanaparthi Sai Charan	B16EE046	TCS-Ninja
16	Rayabarapu Maniteja	B16EE048	TCS-Ninja
17	Kasula Adithya	B16EE049	TCS-Ninja
18	Sai Krishna Adepu	B16EE055	TCS-Ninja
19	Sama Shravya Reddy	B16EE078	TCS-Ninja
20	Kurimilla Sannihitha	B16EE090	TCS-Ninja
21	Moses Pranav Abishai	B16EE102	TCS-Ninja
22	Eppa Sai Krishna	B16EE109	TCS-Ninja
23	Pamu Srinidhi	B16EE051	Hexaware
24	Kadipaka Harshitha	B16EE092	Hexaware
25	Vadlakonda Divyasree	B16EE076	ZenQ
26	Kusampally Sahithi	B16EE013	Infosys
27	Mateti Deepika	B16EE018	Infosys
28	Sai Krishna Adepu	B16EE055	Infosys
29	Nagapuri Mounika	B16EE091	Infosys
30	Sheelam Navya Rani	B16EE112	Infosys
31	Sanober Mirza	B16EE054	CGI
32	Moses Pranav Abishai	B16EE102	MINDTREE
33	Sheelam Navya Rani	B16EE112	MINDTREE
34	Kusampally Sahithi	B16EE013	Wipro-Elite
35	Sama Shravya Reddy	B16EE078	Wipro-Elite
36	Sheelam Navya Rani	B16EE112	Wipro-Elite

Shivani (B15EE003) received the "Sri Podduturi Ganga Reddy Gold Medal" and "Academic Merit Award" during the 36<sup>th</sup> Graduation day at KITS, Warangal.



Section wise Semester Toppers list: (Toppers of exams of even semester A.Y. 2019-20

	A SUBSCIENCE STREET STREET	A shift of the second sec								
S. No.	Name of the Student	Roll No	Semester	SGPA						
1.	Pothu Deepak	B15EE015	VIII	9.85						
2.	Ankam Sairam	B15EE016	VIII	9.85						
3.	Gouda Vineeth	B15EE006	VIII	9.85						
4.	Madha Ruchitha	B16EE064	VI	9.87						
5.	Kothagattu Meghana	B17EE002	IV	10.00						
6.	Thootika Santhosh Kumar	B17EE010	IV	10.00						
7.	Mamidi Sathyika	B18EE002	П	9.73						

 IEEE Student Branch of SREC has organized RSPAC 2019 i.e. Regional Student Professional Awareness Congress 2019, the theme holding 'TECHNOLOGY TRANSFORMATION AND DEEP LEARNING'. Total 23 students were able to track themselves at a point in transformation of technology.



- The NPTEL Online Certificate is awarded to 12 students for successfully completing the 8 weeks course "Introduction to smart Grid".
- MD. IRFAN YAKUB ALI attended two day internship on "Mobile Making & IOT" at KITS, SINGAPURAM during 07-10-2019 to 08-10-2019.
- EEE (2017-21) students successfully participated in Asian e-bike challenge held in Vishakapatnam, A.P. state on 25th to 29th September 2019 representing our college.



- MD. IRFAN YAKUB ALI attended two day internship on "ROBOTICS & AI" at MEA Engineering College during 15-03-2019 to 16-03-2019.
- D. SRAVAN KUMAR attended workshop on "Hybrid Electric Vehicles" at NIT, WARANGAL during 28-09-2019 to 30-09-2019.
- D. SRAVAN KUMAR and B. SAI CHARAN presented a paper titled "Thermo-Electric Generator" at Sreenidhi Institute of Science & Technology, Hyderabad.

 RASHMITHA, MADHURI and PRAVEEN as a team won third prize and cash prize of Rs. 1500/- in the paper presentation event of National Level Technical Symposium-Technozion'19 at NIT, Warangal.





- Fareeha Almas participated in the presented paper titled "Gravitational Waves -Theoritical & experimental Analysis" during National Student's Space Challenge held at IIT Kharagpur from 1<sup>st</sup> to 3<sup>rd</sup> November, 2019.
- Fareeha Almas has been awarded "Verbal Mention" for their performance in UNHRC at BITMUN Hyderabad from 18<sup>th</sup> 20<sup>th</sup> October, 2019.
- P. SHUSHANK participated in sports event (Football) at Kakatiya University, Warangal during the 14<sup>th</sup> - 15<sup>th</sup> December, 2019.
- P. SHUSHANK won 1st Prize in the Chess Championship held at Kamala Institute of Technology & Science, Singapur during 02-04-2019 to 04-04-2019.

#### Alumni

 Korra Balu (2016 Batch passout student) received gold medal at IIT Dhanbad (M.Tech. Power System). Presently he is doing his Ph.D. at IIT Dhanbad.



Calendar of events of EEEA Student Activities for even semester of A.Y. 2019-20:

S No. DATE		ACTIVITY
01	08-Jan-2020	Inauguration and HoD address about PEOs, Pos and PSOs debate and newsletter release
02	22-Jan-2020	Just A Minute
03	29-Jan-2020	House wiring part-1
04	05-Feb-2020	House wiring part-2
05	12-Feb-2020	Seminar on "Modelling and simulation using MATLAB"
06	26-Feb-2020	Tech. Quiz
07	04-Mar-2020	Principle & Working of household electrical appliances Part-1
08	11-Mar-2020	Principle & Working of household electrical appliances Part-2
09	18-Mar-2020	Innovation Contest
10	01-Apr-2020	Marketing event
11	08-Apr-2020	Interaction with Placed Seniors