



Department of  
**Electrical & Electronics Engineering**  
KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE  
WARANGAL - 15



**VOLUME - IV**  
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**CHIEF EDITOR MESSAGE**

With great pleasure and honour I write this foreword. Indeed, this newsletter has lot to look forward. I would like to offer a word of thanks to our readers, our contributors, and our editorial board for their support of the journal and its mission: to improve the quality of technical education to the students. This newsletter will provide a glimpse of student achievement in academic year 2016-2017.

-V. RAMAIAH.

**VISION & 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 and Electronics Engineering.
- To promote scientific inclination and cultivate professional ethics
- To serve organization and society as adaptable engineers, entrepreneurs or leaders.

**Program Educational Objectives (PEOs):**

- PEO1** Choose their careers as practicing engineers ready for modern electrical power and energy industry.
- PEO2** Engage in lifelong learning, career enhancement and adapt to changing professional and societal needs.
- PEO3** To produce graduates with perspective for environmental issues by building the awareness of green and sustainable energy technologies.

**PEO4** 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.
- PO2 Problem analysis** : Identify, formulate, review research 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 research-based 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.
- PO7 Environment and sustainability** : Understand the impact 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.



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**WARANGAL - 15**



**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 Life-long learning :** Recognize 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.

**Student Activities:**

1. Group discussion
2. Singing
3. Guest lecture
4. Debate
5. Extempore
6. Guest lecture
7. Interview tips
8. Poster presentation
9. Guest lecture
10. Picture presentation
11. Extempore

12. JAM

13. Guest lecture

14. Technical Quiz

15. Word Puzzle

The General Secretary of the year 2017-18, S.Saicharan proposed the agenda and encouraged the students to take active part in the activities conducted in the association. She also had stressed on skill development and demanded a 100 percent attendance in the association hours too. The Joint Secretary Post for the academic year has been given to V.Ratnamani and V.Naveen .

**ASSOCIATION DETAILS:**

1. President: **D.Varun**
2. Vice president: **M.Abhilash**
3. General secretary: **S.Saicharan**
4. General secretary: **R.Sriphanii**
5. Joint secretary: **V.Ratnamani**
6. Joint secretary: **V.Naveen**
7. Executive members: **V.Vineethreddy**
8. Executive members: **M.Sairatna**

**SUMSHODHINI 17 '2.0:**

The department of Electrical and Electronics Engineering ,KITSW organized sumshodhini-17'2.0, 11th National level Technical symposium on 12-14 October 2017 aimed to bring out the innovative and technical skills of the students.

The symposium broucher is published across the nation over 400 academic institutions and received more than 800 applications for various competitions ( paper& poster presentation, Witricity, TechQuiz, Techzibits, Hobbyist workshop). 400 applications in various competitions are shortlisted. Outstation participants are provided accommodation in campus guest house. 11th national level symposium, SUMSHODHINI-17'2.0 was inauguration is presided by Dr. Venkateshwar Rao, Principal, KITS Warangal and graced by Prof. V.Ramaiah , HOD, EEED. A total of 400 members, Deans of various sections, heads and faculty of other departments were also present for inauguration. During the symposium a two day workshop is organized on " Introduction to hobbyist& its applications in engineering". Around 100 participants from various institutions have attended the workshop. Resource persons for the workshop are Sri. K. Ajith, Asst .Professor, EEED & Sri. T. Swetha, Asst. Profesor., EEED & G. Sunil Kumar, Asst. Professor, EEED, KITSW. All participants are provided working lunch, Tea & snacks during the workshop.

Technical events like Paper presentations, Poster presentations, Project presentation, Witricity, Techquiz and



# Department of Electrical & Electronics Engineering KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE WARANGAL - 15



many more spot events are organized during the symposium. Workshop, WiTricity, Techquiz organized in association with ISTE KITSW SB. Technquiz is organized in association with KITSW. Valedictory session began with feedback from participants followed by coordinator report and principal address. Lastly, the participation certificates and prizes are distributed to participants and winners in various technical events.



## ELECTRONIC HOBBY WORKSHOP





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WARANGAL - 15



**Industrial Visits:**

Industrial Visit to Kothagudem Thermal Power plant VI-stage (500MW) on 18.03.2017:

The Tour was started on 18.03.2017 at 04:30 AM by bus from KITS point, 36 Students along with 2 Staff members Prof. V.Ramaiah, Dept. of EEE & Sri B.Jagadish Kumar, Associate Professor Dept. of EEE accompanied the tour.

The bus reached Bhadrachalam by 11.30 AM and students visited Lord Sri Rama Temple. After lunch at around 2.30PM, the team started towards Kothagudem Thermal Power plant VI-stage (500MW) which is located at paloncha. The Thermal power plant has a power generation capacity of 1,720 MW with 11 units. It is one of the coal based power plant of TSGENCO .



The Tour started on 10.11.2016 at 6:00 AM by bus from Kazipet Railway Station. Students along with four faculty, Prof. V.Ramaiah, Smt P.Mamatha(Asst. Professor), Sri C.Pavan Kumar, (Asst.Professor) and Sri K.Harish (Asst.Professor) accompanied the tour.

The team reached Srisailem by 10:00 PM and stayed in TSGENCO Guest House and started towards Srisailem Hydel Power Plant with a total capacity of 900 MW (150\*6 each) with a special feature of reversible turbines for pumped storage provision.



The Group Photo of IV/IV B.Tech EEE(I & II) at Srisailem Hydel Power Plant on 11.11.16

**Details of the faculty acquired higher degrees during 2016-17:**

S.No.	Name of the Faculty	Present Qualification	Degree acquired (specialization/ research area)	Institute/ University
1.	Dr. G.Rajender Naik	M.Tech.	Ph.D.	Kakatiya University
2.	Dr.D.Rakesh Chandra	M.Tech.	Ph.D.	NIT, Warangal

**Books/Monographs authored by the faculty:**

S. No.	Name of the faculty	Title of the book	Details of publication
1.	Prof.V.Ramaiah	Electric drives Control of DC and AC drives	LAP Lambert Publications, ISBN:978-3-330-05343-4
2.	Dr G. Rajender Naik	Signal Processing Methods for ECG Analysis	LAP Lambert Publications, ISBN: 9783330003842
		Sensorless Predictive Control of SVPWM VSI Fed Induction Motor	LAP Lambert Publications, ISBN: 978-3-330-07522-1
		Robotic Applications: Image Capturing & Recording Temperature	LAP Lambert Publications, ISBN: 978-3-330-07271-8
3.	Sri P.Nagarajuna Reddy	Electric drives Control of DC and AC drives	LAP Lambert Publications, ISBN:978-3-330-05343-4
4.	Dr.B.Vijay Kumar	Optimal Location and Sizing of UPFC To improve power system stability using Hybrid heuristic techniques	LAP Lambert Publications, ISBN:978-3-330-01786-3
5.	Dr.D.Rakesh Chandra	Wind Integration Studies in Power Systems Fore casting, Stability and Load Management Issues	LAP Lambert Publications, ISBN:978-3-330-04786-0
6.	Sri V.Srinivas	Electric drives Control of DC and AC drives	LAP Lambert Publications, ISBN:978-3-330-05343-4

**Details of STTPs/ FDPs/ Workshops attended by the faculty during 2016-17, conducted outside the Institute:**

S. No.	Name of the Faculty	STTP/FDP/ workshop # /others	Details@	Venue	Duration & Dates
1.	Prof. V. Ramaiah	FDP	Global trends in Renewable Energy systems and smart grids,GTRESSG-2016	Department of Electrical&Electronics Engineering,CVR College of engineering,Hyderabad	21 <sup>st</sup> -26 <sup>th</sup> November 2016
2.	Dr.C. Venkatesh	Seminar	Engineering Education & Research	Hotel Ashoka,Hanmankonda	On 2 <sup>nd</sup> Feb,2017
3.	Sri M. Narasimha Rao	Seminar	Engineering Education & Research	Hotel Ashoka,Hanmankonda	On 2 <sup>nd</sup> February,2017
4.	Sri B. Jagadish Kumar	FDP	Global trends in Renewable Energy systems and smart grids,GTRESSG-2016	Department of Electrical&Electronics Engineering,CVR College of engineering, Hyderabad	21 <sup>st</sup> -26 <sup>th</sup> November 2016
		Work shop	Electronic Product Design	Department of Biomedical Engineering, Osmania University, Hyderabad	2 <sup>nd</sup> -6 <sup>th</sup> January 2017
5.	Sri G. Rajendra Naik	Seminar	Engineering Education & Research	Hotel Ashoka,Hnk	On 2 <sup>nd</sup> Feb., 2017
6.	Sri K. Ajith	Seminar	Engineering Education & Research	Hotel Ashoka,Hnk	On 2 <sup>nd</sup> Feb., 2017
7.	Sri G. Sunil Kumar	Seminar	Engineering Education & Research	Hotel Ashoka,Hnk	On 2 <sup>nd</sup> Feb., 2017
8.	Sri T.Praveen Kumar	Seminar	Engineering Education & Research	Hotel Ashoka,Hnk	On 2 <sup>nd</sup> Feb., 2017
9.	Sri M.Srinivas	Seminar	Engineering Education & Research	Hotel Ashoka, Hnk	On 2 <sup>nd</sup> Feb., 2017
10.	Sri K.Harish	Seminar	Engineering Education & Research	Hotel Ashoka, Hnk	On 2 <sup>nd</sup> Feb., 2017