

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



16-May-2016

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CHIEF EDITOR MESSAGE

With great pleasure and honor I write this foreword. Indeed this newsletter is a testament to the department commitment in imparting quality education in academia. This encompasses a right balance between teaching & learning and very much in line with the mission and vision of the dept. This news letter will provide a glimpse of student achievement in academic year 2015-16

- P. VENUGOPAL RAO.

Vision & Mission of the Department :

Vision :

- To fulfill 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) in B.Tech in Electrical & Electronics Engg. course::

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) in B.Tech in Electrical & Electronics Engg. course:

Program Outcomes	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 analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, an 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 modeling 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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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.

PO10 Communication

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.

Project management
PO11 and finance

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.

PO12 Life-long learning

PROGRAM SPECIFIC OUTCOMES (PSOs) OF B.TECH IN ELECTRICAL & ELECTRONICS ENGG. COURSE:

The Electrical and Electronics Engineering graduates are capable of applying the knowledge of mathematics and sciences in modern power industry.

PSO1

Analyze and design efficient systems to generate, transmit, distribute and utilize electrical energy to meet social needs using power electronic systems.

PSO2

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.

PSO3

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.

PSO4

Student Activities :

ELECTROVISION 2015

The Department of Electrical & Electronics Engineering, KITS, Warangal organized ELECTROVISION 2015, 9th National Level Technical Symposium on 13th & 14th March 2015 aimed to bring out the innovative and technical skills of the students.

The Symposium brochure is published across the nation over 400 Academic Institutions and received more than 800 applications for various competitions (Paper & poster presentation, Witricity, Techtrix, Techquiz, Matlab Workshop). 400 applications in various competitions are shortlisted. Outstation participants are provided accommodation in campus guest house.

9th national level symposium, ELECTROVISION 2015 was inaugurated by Dr.D.M. Vinod Kumar, Professor of Electrical Engineering Department, NIT Warangal. The Inauguration is presided by Dr. Sheshagiri Rao, I/c Principal, KITS Warangal and graced by Prof. P.Venugopal Rao, HOD, EEED & Chairman, ELECTROVISION 2015. A total of 400 members, Deans of various sections, heads and faculty of other departments were also present for inauguration.

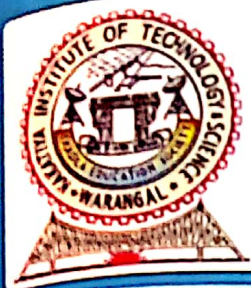
During the symposium a two day workshop is organized on "Introduction to Matlab & Its applications in Engineering". Around 100 participants from various institutions have attended the workshop. Resource persons for the workshop are Sri. E. Harikrishna, Asst. Prof., EEED, KU College of Engineering for Womens – Warangal, Sri. G. Sunil Kumar, Asst. Prof. EEED, KITSW, Sri. K. Harish, Asst. Prof. EEED, KITSW and Sri. H. Ranjith Kumar, Asst. Prof. EEED, KITSW. All participants are provided working lunch, Tea & Snacks during the workshop.

Technical events like paper presentations, poster presentations, Project presentation, WiTricity, Techtrix, TechQuiz and Many more Spot events are organized during the symposium. Workshop, WiTricity and TechQuiz are organized in association with IEEE KITSW SB. Techtrix is organized in association with KITSW ISTE Student Chapter.

Valedictory session which was presided by Prof. P.Venugopal Rao, HOD, EEED, KITS Warangal and graced by Prof. V. Ramaiah, Prof. EEED, KITSW. Valedictory session began with the 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.



Dr. D.M. Vinod Kumar, Chief Guest, Dr. K.V.V. Sheshagiri Rao, I/c Principal, Prof. P. Venugopal Rao, Chairman-Electrovision 2015 and faculty and student coordinators Inaugurating "ELECTROVISION 2015" with lamp lighting on 13th March, 2015



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Newsletter



Dignitaries on the dais releasing the Digital Souvenir of
9th National Level Technical Symposium
"ELECTROVISION-2015" on 13th March, 2015



Prof. P. Venugopal Rao, Chairman, Electrovision 2015
delivering message on the Inaugural function of 9th
National Level Technical Symposium
"ELECTROVISION-2015" on 13th March, 2015



Dr. D. M. Vinod Kumar, Professor of Electrical
Engineering Department, NIT Warangal, Chief Guest
delivering message on the Inaugural function of 9th
National Level Technical Symposium
"ELECTROVISION-2015" on 13th March, 2015



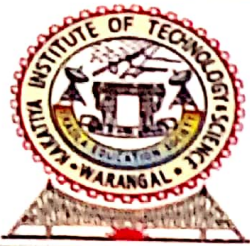
Sri. E. Harikrishna, Asst. Prof. ECE Dept., University
College of Engineering & Technology for Women, KU-
Warangal during Matlab Workshop organized on 13th &
14th March, 2015 as part of ELECTROVISION 2015



Witricity final round Participants with jury members
organized on 13th & 14th March, 2015 as part of
ELECTROVISION 2015



Organizing Committee members of ELECTROVISION
2015 with Chief Guest, Principal and Deans



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1. Electrical Engineering Awareness Programme
Guest lecture by P. Venugopal Rao, Prof. & HOD EEED
2. Debate on Current Affairs and Social Issues
3. Quiz
4. Seminar on "Modeling and simulation of the Wind energy electric conversion system to extract the maximum power from the wind using MATLAB"
5. Singing Competition
6. Dancing Competition
7. Inauguration
8. Teachers Day Celebrations
9. Project and Poster Presentation
10. PPT presentations
11. Mock Interview

ASSOCIATION DETAILS :

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2. **V. Deepika (IV/IV) General secretary**
3. **K.S.P. Balaji (III/IV) Joint secretary**
4. **C. Akshitha (III/IV) Joint secretary**
5. **S. Bharath Kumar (IV/IV) Executive Members**
6. **CH. Rohith (III/IV) Executive Members**
7. **M. Priyanka (III/IV) Executive Members**
8. **A. Hemalatha (III/IV) Executive Members**

FACULTY PUBLICATIONS :

RESEARCH PUBLICATIONS DURING 2015-2016 :

A. SUMMARY OF RESEARCH PRESENTATIONS IN CONFERENCE PROCEEDINGS AND PUBLICATIONS IN REFEREED JOURNALS BY FACULTY OF THE DEPT DURING 2015-16.

S. No.	Details	National / International	Total
1	Publications in Conference proceedings	23	23
2	Publications in refereed Journals	27	27
Total			50

Some of the Publications of faculty:

CONFERENCE PROCESSING :

1. **G.Rajendar, B.Jagadish Kumar "A Study of a DC-DC converter for LED Street Lighting with ZCT using single Auxiliary switch"** in IEEE International conference on Electrical , Electronics, Signals, Communications and Optimization 24th-25th January, 2015 Visakhapatnam, India.
2. **G.Rajendar, BasavarajaBanakara "New Algorithm for Capacitor Placement to improve Voltage stability Using L- IndexSensitivity Matrix"** in International Conference on Engineering & Physical Science Feb 2015.
3. **G.Rajendar, B. Jagadish Kumar "Cascaded Boost converter fed predicative current controlled three phase inverter with reduced THD"** in IEEE 2ndInternational Conference on Knowledge collaboration in Engineering, ICKCE- Mar 2015.
4. **B. Jagadish Kumar, H. RanjithKumar , K. Harish, G. Rajendar, , "Cascaded Boost Converter fed Predictive Current Controlled Three Phase Inverter with reduced THD"**, IEEE International conference knowledge collaboration in engineering 27th-28th March, 2015 Coimbatore, India.

5. **G.Rajendar, B.Jagadish Kumar "A Study of a DC-DC converter for LED Street Lighting with ZCT using single Auxillary switch"** in IEEE International conference on Electrical , Electronics, Signals, Communications and Optimization 24th-25th January, 2015 Visakhapatnam, India.
6. **B. Jagadish Kumar, H. RanjithKumar, K. Harish, G. Rajendar, "Cascaded Boost Converter fed Predictive Current Controlled Three Phase Inverter with reduced THD"**, IEEE International conference knowledge collaboration in engineering 27th-28th March, 2015 Coimbatore, India.
7. **Namani Rakesh, VenkataMadhavaram. T, K. Ajith, G. RajendraNaik and P. Nagarjun Reddy; "A New Technique to Enhance Output Power from Solar PV Array under Different Partial Shaded Conditions"**; IEEE International Conference on Electron Devices and Solid State Circuits 2015, Singapore.
8. **Namani Rakesh, VenkataMadhavaram.T, K. Ajith, G. RajendraNaik and P. Nagarjun Reddy; "A New Technique to Enhance Output Power from Solar PV Array under Different Partial Shaded Conditions"**; IEEE International Conference on Electron Devices and Solid State Circuits 2015, Singapore.
9. **Namani Rakesh, VenkataMadhavaram. T, K. Ajith, G. RajendraNaik and P. Nagarjun Reddy; "A New Technique to Enhance Output Power from Solar PV Array under Different Partial Shaded Conditions"**; IEEE International Conference on Electron Devices and Solid State Circuits 2015, Singapore.

Journals :

1. **G.Rajendar, Basavaraja Banakara "New Algorithm for Capacitor Placement to improve Voltage stability Using L- IndexSensitivity Matrix"** in International Research Journal Volume 03 – Issue 01 ,ISSN 2320-4338,ISBN 978-93-84124-30-4, FEB- 2015.

Faculty Achievements :

Work shop attended :

1. **G. Rajender** has attended IEEE International conference on Electrical , Electronics, Signals, Communications and Optimization at visakhapatnam, India during 24th-25th January, 2015
2. **Prof. V. Ramaiah** has attended FDP onEntrepreneurship Development at Organization DST, Govt. of India, Ministry of MSME, Govt. of India during 23rd Feb. to 07th mar. 2015
3. **Sri N. Rakesh** has attended FDP on Entrepreneurship Development atOrganization DST, Govt. of India, Ministry of MSME, Govt. of India during 23rd Feb. to 07th mar. 2015

Work shop lectures delivered :

1. **Prof. P. Venugopal Rao** has delivered lecture on ELECTRICAL Act 2003 & Captive Power Generation at KITS, Warangal during 09.11.2015

Faculty Visits abroad during 2015-16 :

1. **N. Rakesh** has attended To present research paper in IEEE International Conference on Electron Devices and Solid State Circuits (EDSSC'15) at singapore during 1st to 4th June, 2015