



ENERGIZE

VOLUME 1 ISSUE 1

JULY-DEC 2014



**DEPARTMENT OF
ELECTRICAL AND ELECTRONICS ENGINEERING**



KCG
COLLEGE OF TECHNOLOGY

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Congratulations!

Congratulations to **D.InbaKumar** of II Year EEE for suggesting the title "Energize" for our Newsletter and winning the Best Title contest.

THE BEGINNING

KCG College of Technology, was founded in 1998 to fulfill the Founder-Chairman, Dr. K.C.G. Verghese's vision "To make every man a success and no man a failure". It is a **Christian Minority Institution**, affiliated to Anna University, Chennai and approved by AICTE, New Delhi. KCG College of Technology was formerly known as National Institute of Technology & Science, has been certified as an ISO 9001:2008 institution.



Dr. ELIZABETH VERGHESE
CHAIR PERSON

KCG understands the value of empowering its student communities with tools and opportunities that can augment their skills that are vital today. i-Cell and e-Cell were established on May 6, 2009 to guide and encourage students to take up projects that evolve with new, fresh ideas and challenge conventional boundaries through their creativity. This cell conducts various training programmes to transform the staff and student ideas.



Dr. ANAND JACOB VERGHESE
DIRECTOR & CEO

FROM PRINCIPAL'S DESK



Dr. T. RENGARAJA
PRINCIPAL

"Real education has to draw out the best from the boys and girls to be educated", truly inspired by the visions of Shri Mahatma Gandhi and other eminent educationists of our country. We have decided to bring about creative steps in education with the use of modern and innovative approaches to impart knowledge.

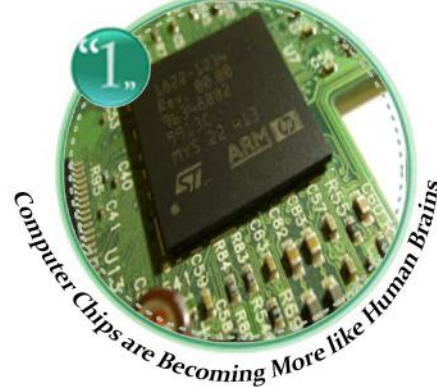
FROM HOD'S DESK



Dr. P. DEIVA SUNDARI
HEAD OF THE DEPARTMENT

Greetings to all. We are proud to present the first issue of our Newsletter "EnErgizE" which would give an insight about our department. I would like to thank the student editors and the staff members who have contributed in making this newsletter a grand success.

FACULTY ACHIEVEMENTS



Seminars/Workshops attended

1. Ms. L.N. Ramya attended QIP on 'Green Building Concepts and Sustainable Development' at NITTR, Chennai from 08/12/2014 to 12/12/2014.
2. Ms. J. Agnus Jenith attended Workshop On 'Optimum Utilization of Solar Energy & It's Application' at DMI College of Engineering from 13/11/2014 to 14/11/2014.
3. Mr. Ramesh Prabhu and Mr. B. JeyaKumar attended Training on 'Solar PV Off-Grid and On-Grid System Design' at SSN College of Engineering from 13/11/2014 to 14/11/2014.
4. Mr. S. Rubin Bose and Mr. S. Subash Chandra Bharathi attended National Seminar On 'Embedded Systems and Communication Protocols Used in Automobiles' at PSG College of Engineering from 12/12/2014 to 13/12/2014.
5. Ms. S. Ranjani attended National Workshop on 'Nano materials for Solar Energy Conversion' at SSN College of Engineering from 05/12/2014 to 06/12/2014.
6. Mr. J. Arun Venkatesh attended Workshop on 'Challenges in Integration of Renewable Energy Resources' at PSG College of Engineering from 22/08/2014 to 23/08/2014.
7. Mr. K. Karthikeyan attended Workshop on 'Solar Photovoltaic System' at CEG Campus from 23/06/2014 to 26/06/2014.
8. Mr. S. Balaji and Mr. S. Rajesh attended Workshop on 'Power Conversion for smart grid' at SSNCE from 18/07/2014 to 19/07/2014.
9. Mr. B. Jeyakumar attended Workshop on 'Academic conclave by DCTACT & NI' at Radisson Blue on 20/08/2014.
10. Ms. Rashmi Biswas attended Workshop on 'Modeling and simulation of Electrical Power systems' at Loyola ICAM from 19/09/2014 to 20/09/2014.
11. Mr. Rubin Bose, J. Arun Venkatesh and Mr. K. Vijay Kumar attended Workshop on 'PV cells and Micro grid and Roof top of Solar Installation' at L&T on 07/11/2014.

Faculty Development Programmes



1. Ms. J. Agnus Jenith .attended Faculty Development Program on 'Transmission and Distribution' at Eswari Engineering College from 25/06/14 to 01/07/14.
2. Ms. S.Ranjani attended Faculty Development Program on 'Power Quality' at AIHT from 01/12/2014 to 08/12/2014.

Journal Publications

International:

1. Dr. P. Deiva Sundari published her work on '**Instantaneous Power based Current Control Scheme for VAR Compensation in Hybrid AC/DC Networks for Smart Grid Applications**' in IET Power Electronics, Vol 7, Issue 5, May 2014, pp.1216-1226 .
2. Dr. P. Deiva Sundari published her work on '**Nonlinear Intermittent Instabilities and their Control in an Interleaved DC/DC Converter**' in IET Power Electronics, Vol 7, Issue 5, May 2014, pp.1235 -1245.
3. Dr. P. Deiva Sundari and Mr. S. Rajesh published their work on '**A two stage high power LED Driver for Street Lighting application**' in IJAER, ISSN 0973-4562, Vol. 9, No.25 (2014), pp. 8650 -8654.
4. Dr. P. Deiva Sundari and Ms. J. Agnus Jenith published their work on '**Automatic Control of Generator parameters using PLC in power stations**' in IJAER.
5. Mr. K.Vinoth published his work on '**Fuzzy Logic Control and Minimizing Commutation Torque Ripple for Brushless DC motor Based on Series Converter**' in IJMTER Volume 1, Issue 6, Dec 2014.
6. Dr. P. Deiva Sundari and Mr. S. Balaji published their work on '**A Magneticless Nx DC-DC converter for Solar PV System**' in IJAER.
7. Mr. S. Rubin Bose published his work on '**Embodied Conversational Agents Based Home Automation Using FPGA**' in IJRRSET.
8. Mr. J. Arun Venkatesh published his work on '**Mitigating Power Quality Problems and Comparison of PV Supported Dynamic Voltage Restorer and Distribution STATCOM in Stand Alone Wind Energy Conversion System**' in International Journal of Applied Engineering Research, pp. 26431-26445, Volume 9, Number 24.
9. Dr. P. Deiva Sundari and Mr. Ramesh Prabu published their work on '**Swing Generator using Power Electronics**' in International Journal of Applied Engineering Research.
10. Dr. P. Deiva Sundari published her work on '**Permanent Magnet Synchronous Wind Generator With Matrix Converter Using Venturini Algorithm**' in International Journal of Applied Engineering Research.
11. Dr. P. Deiva Sundari and Mr. S. Balaji published their work on '**High boost ratio hybrid DC-DC converter for battery charging applications**' in International Journal of Applied Engineering Research.
12. Dr. P. Deiva Sundari and Mr. Ramesh Prabu published their work on "**Efficiency Prediction of ESP Mathematical Modelling for PV applications**", in International Journal of Engineering Research & Central Science.

> **All of us do not have equal talent. But . all of us have an equal opportunity to develop our talents.**

- Dr. A.P.J Abdul Kalam

National:

1. Ms. V. Ramya published her work in '**Renewable energy using Flywheel Energy Storage System**' in Journal Of Chemical And Pharmaceutical Science (Special Issue Dec 2014).
2. Ms. V. Ramya presented the paper '**Renewable energy in power grid using Flywheel Energy Storage System technology by using partial magnetic levitation**' at NCRTEE '14.
3. Ms. V. Ramya presented the paper '**Renewable energy using Flywheel Energy Storage System**' at NCGET 2014.

STUDENTS ACHIEVEMENTS



Workshops/Seminars/Events

1. The students participated in two day Workshop on **'Embedded System Design Using ARM'** at KCG College of Technology from 18/12/2014 to 20/12/2014.
2. The students participated in three day Workshop on **'Solar PV System Design'** at KCG College of Technology from 12/12/2014 to 13/12/2014.
3. The students participated in IEEE Workshop on **'Energy Auditing And Conservation'** at KCG College of Technology on 13/09/2014.
4. The students participated in **'Robotics workshop – ROBOTRYST'** at Robosapiens Technologies Pvt., Ltd., Chennai on 26/11/2014.
5. The students participated in **Spoken Tutorial/Firefox** at IIT Bombay from June – Dec 2014.

Conferences Attended

National Conferences :

1. S. Deebika and C. Sangavi of IV year presented their work **'Facts about Flexible AC Transmission Systems (FACTS) Controllers: Applications and Benefits'** in National Conference on Recent Trends in Modern Electronics and its Applications.
2. S. Madhumitha of IV year presented her work **'Atmospheric Electricity And The Global Circuits'** in National conference on Recent Trends in Modern Electronics and its Applications.

International Conferences :

1. S. Deebika and Priyanka Joseph of IV year presented their work titled **'Implementation Of Smart Grid Technology In Pondicherry Power Systems'** in National Conference on NCAICA'14.
2. Mahalakshmi and Ashmita Anna Mathew of III Year presented their work titled **'Implementation of an Embedded System of UART and LED using UBOOT and Linux'** in International Conference on ICSTEM '14.
3. M. Prasanna Kumar of III year presented her work titled **'Implementation of Multiple - Input Multiple-Output Switched - Capacitor Resonant DC - DC Converter using Double, Half and Inverting circuits'** in IEEE EESCO International conference in Nov 2014.



Project Presentations



1. Mr. V. Vignesh and Mr. Naveen Honest Raj of II year received **Second Prize** in All India Project presentation at Adhiyaman Engineering College, Hosur.
2. Mr. N. Nijandhan of II year received **First Prize** in National Conference at Veltech, Chennai.
3. Mr. N. Nijandhan of II year received **Special Appreciation** in International Conference at SRM University, Chennai.
4. Mr. N. Nijandhan, Mr. Purushothaman and Ms. Priyadharshini of II year received **Second Prize** in National Technical Symposium at RMD Engineering College, Chennai.
5. Mr. V. Vignesh and Mr. Naveen Honest Raj of II year received **First Prize** in Inter College Paper Presentation titled '**GPS Tracking System With License Detector And Speed Control Sensor**' at KCG College of Technology, Chennai.
6. Ms. T.Manjula and Ms. Kundhavai Nachiyar of III year received **Second Prize** in Inter College Paper Presentation titled '**Energy Conservation**', at KCG College of Technology, Chennai.
7. Ms. Kundhavai Nachiyar and Ms. T. Manjula of III year received **First Prize** in Paper Presentation for the paper titled '**Energy Conservation**', at St.Peter's College of Engineering and Technology.
8. **Mr. Sunil and Mr. Yadhav of III year received First Prize in Inno Wah Project challenge by IIT PALS.**
9. Mr. N. Nijandhan, Mr. Purushothaman and Mr. R. Nishant received **First Prize** in Quanta 2014, at CEG, Chennai.

Guest Lectures arranged in the Department

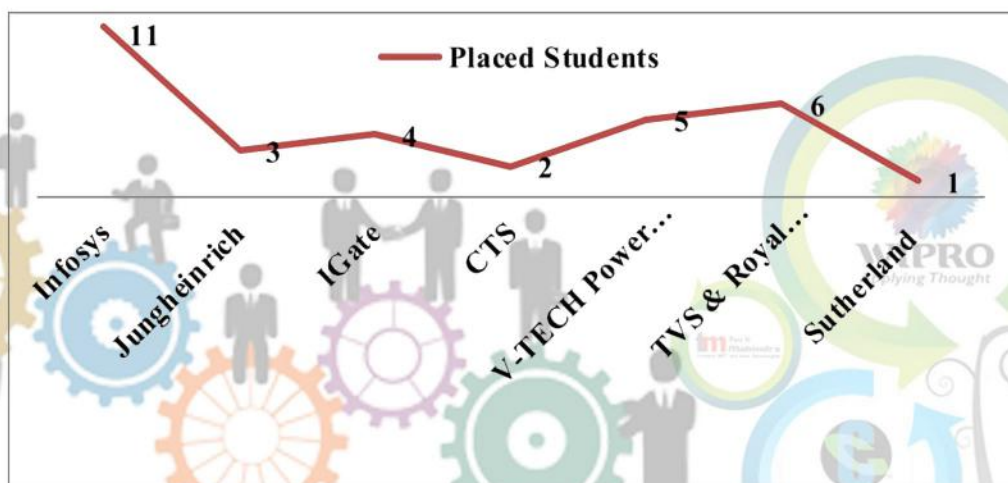


1. A guest lecture was arranged on '**IEEE Students Drive**' for our students on 18/07/2014. The key speakers were Mr. Nivas Ravichandran, Senior Business Executive Lema Labs, India Representative for Young Professionals and Social Media Lead of IEEE Region 10 and Ms. Fathima Hathoon Nargis, Graduate Engineer Trainee, Viesoleli Engineers Pvt. Ltd., New Initiative Lead IEEE WIE.
2. A guest lecture was arranged on '**Project Management Basics for Engineers**' for our students on 06/08/2014. The key speaker was Mr. Palani, Vel Rajan, Associate Manager / Production Management, Toshiba JSW Turbine and Generator Pvt. Ltd.
3. A guest lecture was arranged on '**Electromagnetic Theory**' for our students on 09/09/2014. The key speaker was Mr. Azhagu Murugan, AP, Sri Sairam Engineering College, Chennai.
4. A guest lecture was arranged on '**Engineering Test Services in Aviation**' for our students on 12/12/2014. The key speaker was Mr. Mohanakrishnan, Test Engineer, ETS, Honeywell Aerospace, Bangalore.

Workshops arranged in the Department

1. A workshop was arranged on 'Solar PV System Design' for our students from 11/12/2014 to 12/12/2014 by Steinbeis Solar Research Centre, Chennai.
2. A workshop was arranged on 'Embedded System Design using ARM' for our students from 18/12/2014 to 20/12/2014 by ABE Semiconductor designs.

Placement Status



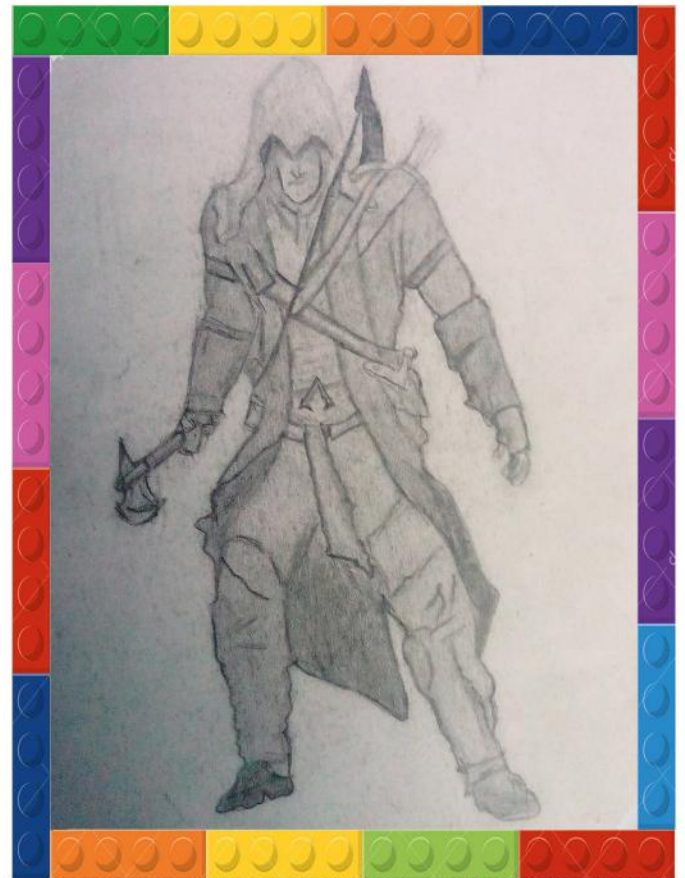
New Joiners to EEE Family



Arts and Pics



M. Nambirajan / 1st Year

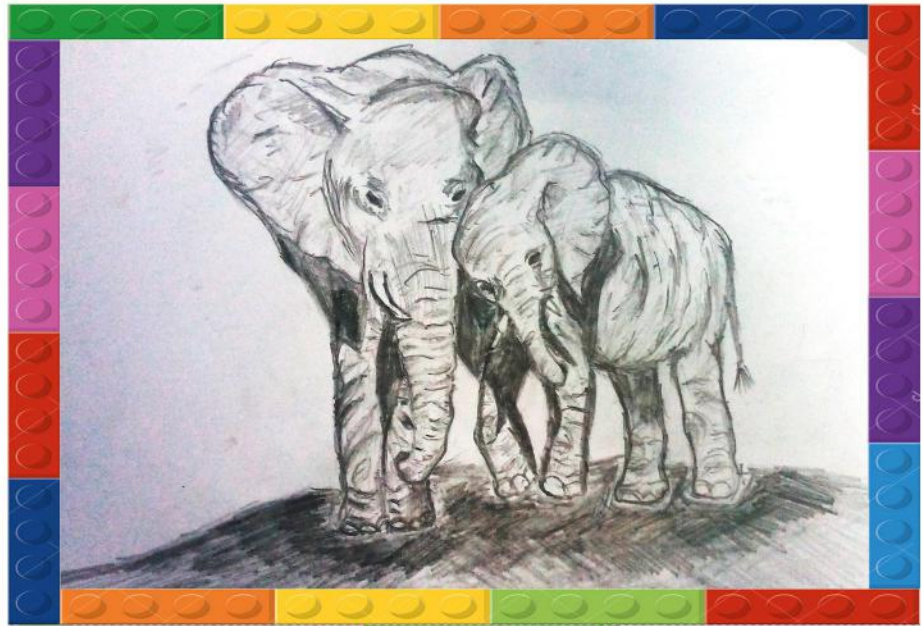


M. Nambirajan / 1st Year



M. Nambirajan / 1st Year

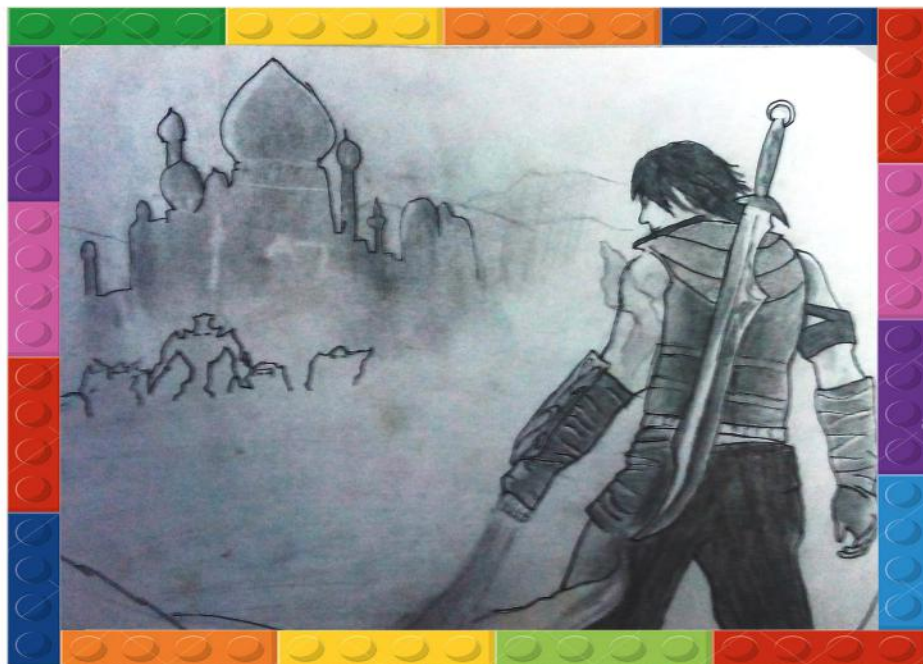
Arts and Pics



T. Santhosh / 1st Year



M. Nambirajan / 1st Year



M. Nambirajan / 1st Year



EDITORIAL TEAM

Faculty Coordinators

1. P. Deiva Sundari / Head of the Department
2. D. Saravanakamalam / Associate Professor

Student Coordinators:

1. S. Deebika / IV Year
2. C. Sangavi / IV Year
3. T. Manjula / III Year
4. N. Kundhavai / III Year
5. V. Vignesh / II Year
6. R. Kumaran / II Year

Any suggestions
mail us at

newsletteree@googlegroups.com



Designed by



R. Kumaran

SUCCESS
is not final
FAILURE
is not fatal

IT IS THE COURAGE TO
CONTINUE THAT
COUNTS

Winston Churchill