

# Currents

Issue. 2 July 2017-June 2018



## About Department

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The Department of Electrical and Electronics Engineering has been playing a vital role in producing professionals of highest caliber ever since it was established in 1998. The department runs one under-graduate programme and one post-graduate programme (M.Tech. - Electrical Power Systems) to cater to the ever challenging needs of technical excellence in all areas of Electrical Engineering such as Power systems, Control Systems & Power Electronics. The department conducts regular seminars, guest lectures, workshops and technical symposiums on latest technologies.

The Department has obtained UGC-Autonomous Status in the Year 2014 and have been running programmes (B. Tech. & M. Tech.) successfully. The College Academic Council and Board of Studies of the department strive to provide quality education with the most advanced curriculum to make the students industry ready and excel in the contemporary business world.

The B. Tech. Programme under Department of Electrical and Electronics Engineering was accredited by the National Board of Accreditation (NBA) of All India Council for Technical Education (AICTE).

# VISION AND MISSION OF THE DEPARTMENT

## Vision

To become a Department recognized for its ability to provide quality education to the students and make them excel in the domain of electrical & electronics engineering, with research proficiency and ethics, to meet the challenges of society.

## Mission

M1: To impart quality education and advancements in program of studies for producing engineers with scientific temperament and moral values in the field of electrical & electronics engineering.

M2: To create and develop research culture with deep sense of commitment, so as to enable the industries to adopt the research outputs.

M3: To enhance the technical dexterity, so as to find the suitable solutions in their respective domain, for welfare of the society.

## Quality Policy

Madanapalle Institute of Technology & Science is committed to bring out and nurture the talents and skills of youth in the fields of Engineering and Management to cater to the challenging needs of society and industry by

- ❖ Contributing to the academic standards and overall knowledge development of the students
- ❖ Providing excellent infrastructure and conducive learning environment.
- ❖ Enhancing the competence of faculty and promoting R&D Programs
- ❖ Collaborating with institutions and industries.
- ❖ Ensuring continual improvement of Quality Management System.

## Message from Correspondent

Technology places a vital role in shaping a student's career. EEE Department provides excellent opportunities for the students to discover their potentials. If students are able to go out of college with flying colors, it's no exaggeration to say that it's only because of the supportive environment that is provided in the college. Currents provides a glimpse of the activities and achievements in EEE Department. Students must make use of the opportunities provided to them in order to excel in their career. They must aim high. Students should consider technology as a treasure box and make proper use of it to achieve their goals. It gives me an immense pleasure looking at the efforts put by the EEE department, in coming up with creative ideas to design a souvenir every year.



**Dr. N. Vijaya Bhaskar Choudary,**  
*M.Com, Ph.D.*

*Secretary & Correspondent*

## Message from Chairman

The Electrical and Electronics Engineering Department has produced many phenomenal students who are at very good positions. Students graduated from our college, come back here and support the institution to the best of their abilities. I advise the students to have a clear vision about what they want to become and plan accordingly at the earliest possible stage. They must gain practical knowledge rather than mere bookish knowledge to reach greater heights in their career. They must convert their ideas into reality and must not refrain from trying out new things. I hope the Department continues to achieve success in every aspect and publish the achievements in this incredible Currents every year.

In the present sophisticated world of opportunities, at the best of times in the best of context, we are there to strengthen such programs that empowers work ambience and gets perfect platforms to those who want to grow and be in forefront of the industry.

I wish you all the very best.



**Sri. N. Krishna Kumar,**  
*M.S (U.S.A), Chairman*

## Message from Principal

*The technological information dissemination to public is the key factor in bringing concerned people/Department together. The Department of Electrical and Electronics Engineering contributing best of its efforts in development of Newsletter by publishing Currents. The documentation of different activities and bringing it to relevant technical community is the excellent towards service of society. These activities will help in making the science and technology much stronger towards knowledge bank. I am congratulating all the EEE department staff and students on this occasion. I wish good luck and extend my warm patronage to all of those who have contributed their best to bring out the Currents in good shape.*



**Dr. C. Yuvaraj, Ph.D.**

*Principal*

## Message from HOD

I am happy that Dept. of EEE is bringing out a Currents (Newsletter). Currents will definitely help to showcase the activities that are happening in the department. It also helps in building up teamwork which is very much needed today in the world of competition. It provides a platform for exposing the merits and academic achievements of the faculty. This enhances the documentation culture of the department. This would definitely create an impact in the minds of readers, by way of providing larger visibility and dimension to the campus. I hope that this culture of releasing Newsletter continue forever.



**Dr. Asha Rani M.A., Ph.D.**

*Head of the Department*

*Department of EEE*

## EEE Department Faculty

| S.No | Name of the Faculty         | Designation                | Qualification                  |
|------|-----------------------------|----------------------------|--------------------------------|
| 1    | Dr. Ilampoornan M. K.       | Professor                  | Ph.D. (IIT, Madras)            |
| 2    | Dr. M. Vaigundamoorthi      | Professor                  | Ph.D. (Anna University)        |
| 3    | Dr. C. Kamal Basha          | Professor                  | Ph.D. (JNTUA, Anantapur)       |
| 4    | Dr. Rajendra Prasad Narne   | Assoc. Professor           | Ph.D. (NIT, Rourkela)          |
| 5    | Dr. Suprava Chakraborty     | Assoc. Professor           | Ph.D. (IIT (ISM), Dhanbad)     |
| 6    | Dr. K. Arul Kumar           | Assoc. Professor           | Ph.D. (VIT)                    |
| 7    | Dr. M. Chakkarapani         | Assoc. Professor           | Ph.D. (NIT, Tiruchirappalli)   |
| 8    | Dr. Lakshmanan S. A.        | Sr. Asst. Professor & Head | Ph.D.(IIT, Mandi)              |
| 9    | Dr. Hira Singh Sachdev      | Sr. Asst. Professor        | Ph.D. (NIT, Jamshedpur)        |
| 10   | Dr. Shubhashish Bhakta      | Sr. Asst. Professor        | Ph.D. (IIT (ISM), Dhanbad)     |
| 11   | Dr. A. V. Pavan Kumar       | Sr. Asst. Professor        | Ph.D. (BITS-Pilani, Hyderabad) |
| 12   | Dr. Sumit Verma             | Sr. Asst. Professor        | Ph.D.<br>(IIT (ISM), Dhanbad)  |
| 13   | Dr. Subhasish Mahapatra     | Sr. Asst. Professor        | Ph.D. (NIT, Rourkela)          |
| 14   | Dr. M. Vijay                | Sr. Asst. Professor        | Ph.D. (NIT, Surathkal)         |
| 15   | Dr. Pratap Ranjan Mohanty   | Sr. Asst. Professor        | Ph.D. (NIT, Rourkela)          |
| 16   | Dr. Parth Sarathi Panigrahy | Sr. Asst. Professor        | Ph.D. (IEST, Shibpur)          |
| 17   | Dr. Arijit Bardhan Roy      | Sr. Asst. Professor        | Ph.D. (IEST, Shibpur)          |
| 18   | Dr. Soumya Ranjan Mahapatro | Sr. Asst. Professor        | Ph.D. (NIT, Rourkela)          |
| 19   | Dr. Aurobinda Bag           | Sr. Asst. Professor        | Ph.D. (NIT, Rourkela)          |

|    |                            |                     |  |
|----|----------------------------|---------------------|--|
| 20 | Dr. Amresh Kumar Singh     | Sr. Asst. Professor | Ph.D. (IIT, Delhi)                             |
| 21 | Dr. Santosh Kumar Singh    | Sr. Asst. Professor | Ph.D. (NIT, Rourkela)                          |
| 22 | Dr. Pradosh Ranjan Sahoo   | Sr. Asst. Professor | Ph.D. (NIT, Rourkela)                          |
| 23 | Dr. Narendrababu A         | Sr. Asst. Professor | Ph.D. (NIT, Rourkela)                          |
| 24 | Dr. Sudarshan swain        | Sr. Asst. Professor | Ph.D. (NIT, Rourkela)                          |
| 25 | Mr. Arvind Kumar Prajapati | Asst. Professor     | M.Tech., (Ph.D.)<br>(IIT, Roorkee)             |
| 26 | Mr. Vishwanatha Siddhartha | Asst. Professor     | M.Tech., (Ph.D.)<br>(IIT, Roorkee)             |
| 28 | Ms. Pikaso Pal             | Asst. Professor     | M.Tech., (Ph.D.) (IITISM,<br>Dhanbad)          |
| 29 | Mr. Venkatachalam KM       | Asst. Professor     | M.Tech., (Ph.D.)<br>(Anna University, Chennai) |
| 31 | Mr. M. Lokanatha           | Asst. Professor     | M.Tech.  |
| 32 | Mr. B. Vijaya Kumar        | Asst. Professor     | M.Tech.  |
| 33 | Mr. Sateesh Devanga Yerra  | Asst. Professor     | M.Tech.  |
| 34 | Mr. P. Balamurali Krishna  | Asst. Professor     | M.Tech., (Ph.D.) (KIIT, Bhubaneswar)           |



## Events Organized

### Alumni Guest Lecture

Dept. of EEE organized A National Level Technical Symposium TERA-2K18 “**Techno fest on Electrical Revolutions and Advancements**” on 3rd April 2018.



Dr. N. Prabakaran, Senior Assistant Professor of EEE, introduced the chief guest of the function: **Mr. G. Thiruvarul**, System Engineer, Alstom Ltd, Bengaluru. During his inaugural address, he informed that the electric vehicle, automation, robotics would be the future emerging trends in the field of Electrical Engineering. He urged the students to come up with innovative ideas and solutions to overcome the challenges to help the society and country. He motivated the students to take up research projects which are supported by the funding agencies of the State and Central Governments. He informed the students to publish research papers in national and international journals which would be useful to their future career development.

Dr. M. A. Asha Rani- Coordinator & HOD of the EEE talked about the history of the department and TERA. She also highlighted various facilities and faculty expertise available in the department. Dr. K. R. Kashwan, Dean ECE & EEE, in his special address talked about new upcoming technologies in the field of electrical engineering. Dr.C. Yuvraj, Principal, in his presidential address illuminated the facilities in MITS college, importance of IOT, electric vehicle, automation for future generation. He also appreciated the faculty members and students for organizing of TERA-2K18 every year in the EEE department.

## Alumni Guest Lecture

Dept. of EEE organized a Alumni Guest Lecture on "**CAREER OPPURTUNITIES AFTER ENGINEERING**" was organized on 22th June 2017.



The guest lecture was started at 10 a.m. the resource person **Mr Abdul Rehman**, was introduced by HOD, Dept. of EEE. The guest speaker addressed the significant of career planning after engineering. The Focus of preparation is to be motivated and get aware of the government job opportunities available after Engineering: -

The career opportunities in private sector and public sector were presented in the form of a flow chart. The importance of focusing on GATE, clearing GATE exam gives the opportunity to apply for PSU jobs as well as entry for higher education at IIT's and NIT's. The opportunities in Government jobs State and Central level were explained. State level jobs such as APGENCO, TRANSCO, APDISCOM, VIZAG STEEL PLANT, Civil Services. Central levels opportunities such as UPSC (IES, IAS, IFS, IPS), NTPC, SAIL, HAIL, SAIL, INDIAN RAILWAYS, POWER GRID, BANKING SECTOR etc... The students can choose a path by pursuing M-Tech, P hD from the IIT's and NIT's. Core sectors jobs such as, Vijay Electricals, GE, HBL Power Systems, Siemens, Private power Plants.

## World Thrift day

Dept. of EEE organized a Program on “**World Thrift day**” on 30th October 2017.



The World Savings Day was established on October 31, 1924, during the 1<sup>st</sup> International Savings Bank Congress (World Society of Savings Banks) in Milano, Italy. The Italian Professor Filippo Ravizza declared this day the "International Saving Day" on the last day of the congress. In the resolutions of the Thrift Congress, it was decided that 'World Thrift Day' should be a day devoted to the promotion of savings all over the World. In their efforts to promote thrift, the savings banks also worked with the support of the schools, the clergy, as well as cultural, sports, professional, and women's associations.

All the students of MBA & EEE assembled at Mechanical seminar hall at 2.30 pm. M.Sravani I year MBA invited the guest onto the stage. Ch. Rampradasa Rao- Dean III C, **Mr.Surya Sudheer**, Assistant Manager - State Bank of India, **and Mr. Devandra**, Assistant Manager - Indian Bank were the dignitaries invited.

Dr. Ch.Rama Pradasa Rao addressed the gathering and said '*1 rupee saved is nothing but 1 rupee earned*'. He also explained about the savings, and investments in share market.

## ALUMNI MEET

MITS organized an "**ALUMNI MEET**"- on 27-28th October 2017 a programme to facilitate, consolidate and coordinate alumni activities on MITS campus. The objectives of the meet were to interact with the alumni, planning future events, interaction with students, taking 'alumni feedback'. The meet was attended by 150+ alumni of various batches.



The session started with welcome and opening remarks by Dr. G. Sadasiva Prasad. Dr. C. Yuvaraj –Principal, highlighted vision and mission of MITS. Afterwards, Mr. Shankar Reddy - President MITS Alumni Welfare Association and **Ms.B.R Sushma** Vice president MITS Alumni Welfare Association addressed the gathering. Mr.Saravan Babu, SPO spoke about the growth of campus placements. Dr. Sremmant Basu Dean Administration touched upon the importance of alumni to the college. Many alumni members shared their experiences of corporate expectations during the session. Alumni showed their interest to contribute to MITS whenever the need arises.

Felicitation to the Notable Alumni:

Mr.S. Shankar Reddy - President MITS Alumni Welfare Association Ms.B.R Sushma Vice president MITS Alumni Welfare Association. Mr. M.Srineevasulu, who received the 'Best Sarpanch Award' from the Chief Minister of Andhra Pradesh and National award from the Central minister. After the felicitation, the alumni visited their respective departments for student interaction. After that they went to Horsley Hills for lunch. After lunch they came back to college and participated in closing ceremony with discussion on further alumni meet, suggestions and feedback.

## Faculty News

### Welcome: New Faculty

**Mr. Sumit Verma**, Asst. Professor - Department of Electrical and Electronics Engineering Reported on 04.01.2018.

**Mr. Subhasish Mahapatra**, Asst. Professor - Department of Electrical and Electronics Engineering Reported on 27.02.2018.

**Mr. Pratap Ranjan Mohanty**, Asst. Professor - Department of Electrical and Electronics Engineering Reported on 27.02.2018.

**Mr Abhishek Ghosh Roy**, Asst. Professor - Department of Electrical and Electronics Engineering Reported on 27.04.2018.

**Mr Arijit Bardhan Roy**, Asst. Professor - Department of Electrical and Electronics Engineering Reported on 02.05.2018.

**Dr Hira Singh Sachdev**, Sr. Asst. Professor - Department of Electrical and Electronics Engineering Reported on 10.05.2018.

**Mr Pradosh Ranjan Sahoo**, Asst. Professor - Department of Electrical and Electronics Engineering Reported on 16.05.2018.

### Faculty Achievements

**Dr. C. Kamal Basha**, Associate Professor - Department of Electrical and Electronics Engineering has been appointed as the Chief Coordinator for Institutional Disciplinary Committee on dated 29.06.2018.

**P.Balamurali Krishna**, Teaching Assistant has won the Man of the series award in cricket tournament on the occasion of MITS annual day sports meet 2018.

**Dr. K. Arul Kumar Dr. Lakshmanan S. A. Dr. M. Chakkarapani Dr. N. Prabakaran D. Chinnakullay Reddy** are awarded with " CERTIFICATE OF APPRECIATION" for their roles as Mentor in NPTEL ONLINE CERTIFICATION COURSES duration from January-April 2018.

**G. Raghu Chandra**, Served as a Conference Chair Eighth International Conference on "Advances in Computer Engineering ACE 2018", on 20 Jan 2018 at ACEECom, Trivandrum.

**Dr. Rajendra Prasad Narne**, awarded as Certificate of Outstanding Contribution in Reviewing for Solar Energy(Elsevier).

**Dr. Rajendra Prasad Narne**, awarded as Certificate of Reviewing for International Conference On Advanced Computing and Intelligent Engineering (ICACIE 2017).

**Dr. Pavan Kumar A V**, awarded as Certificate of Reviewing for IEEE Transactions on Sustainable Energy.

**Dr.N. Prabakaran**, awarded as Certificate of Reviewing for International Journal of Renewable Energy Research and Journal of Modern Power System and Clean Energy.

## Guest Lectures Delivered

**Dr. Pavan Kumar A V**, delivered a Guest Lecture on “Smart Grid Technologies (SGT-2k18)” on 04-06 June 2019 at Narayana Engineering College, Nellore.

## Faculty Attended

| Sl. No. | Faculty Name         | Name of the Activity | Name of the program  | From Date   | To Date     | Organized by  | Venue                                      |
|---------|----------------------|----------------------|--|-------------|-------------|---|--|
| 1.      | Dr. M. Chakkarapani  | Conference           | SOLAR & RENEWABLE Expo 2017, an Exhibition & Conference on Renewable Energies for a sustainable Future | 10-11- 2017 | 10-11- 2017 | Andhra Pradesh Technology Developmet & Promotion Centre | The Gateway Hotel, Vijayawada              |
|         |                      | Workshop             | SiC Devices Enabled Power Converters Applications-Opportunities and Challenges                         | 11-12-2017  | 15-12-2017  | Global Initiative of Academic Networks (GIAN)           | NIT Tiruchirappalli                        |
|         |                      | Training             | Twelve Day Induction Program   | 29-01-2018  | 12-02-2018  | Instrucors Training Division                            | MITS, Madanapalle                          |
| 2.      | Dr. Lakshmanan S. A. | Training             | Twelve Day Induction Program   | 29-01-2018  | 12-02-2018  | Instrucors Training Division                            | MITS, Madanapalle                          |
| 3.      | Dr. Pavan Kumar A V  | Training             | Quality Management Systems (Based on ISO 9001 – 2015 standard)   | 16-05-2018  | 16-05-2018  | SAR, Global Accreditation, Training                     | MITS, Madanapalle                          |
|         |                      | Conference           | International Conference On Electrical, Electronics, Computers, Communication, Mechanical and          | 28-01-2018  | 29-01-2018  | Priyadarshini Engineering College, Vellore              | Priyadarshini Engineering College, Vellore |

|    |                 |          |  |            |            |                                     |   |
|----|-----------------|----------|--|------------|------------|-------------------------------------|---|
|    |                 |          | Computing (EECCMC)-2018  |            |            |                                     |   |
| 4. | Dr. Sumit Verma | Training | Quality Management Systems (Based on ISO 9001 – 2015 standard) | 16-05-2018 | 16-05-2018 | SAR, Global Accreditation, Training | MITS, Madanapalle   |
|    |                 | Training | Twelve Day Induction Program                                   | 29-01-2018 | 12-02-2018 | Instructors Training Division       | MITS, Madanapalle   |
| 5. | Dr. M. Vijay    | Workshop | EPICS  | 05-02-2018 | 05-02-2018 | IUCEE AP Chapter                    | VR Siddhartha Engineering College, Vijayawada             |
|    |                 |          | IUCEE AP Chapter EPICS   | 24-04-2018 | 25-04-2018 | IUCEE AP Chapter                    | Sri Venkateswara College of Engineering (SVCE), Tirupathi |
|    |                 | Training | Twelve Day Induction Program                                   | 29-01-2018 | 12-02-2018 | Instructors Training Division       | MITS, Madanapalle   |



## Faculty Publications

| S.No | Faculty Name                | Co-Author  | Paper/Book title   | Publisher   |
|------|-----------------------------|--|--|---|
| 1.   | Dr. Mohan Krishna S.        | M.Daya J.L.,<br>F.Padmanaban,<br>S.Mihet-Popa      | Real-Time Analysis of a Modified State Observer for Sensorless Induction Motor Drive Used in Electric Vehicle Applications                 | Energies 2017, 10(8), 1077, 25 July 2017  |
| 2.   | Mr. Garimella Raghu Chandra | Nandhyala Sandeepthi,<br>A.N.V.J. Rajagopal        | Multifunctional Shunt a Power Filter and Thyristor Controlled Reactor for Distributed Generation Integration and Power Quality Improvement | International Journal of Power Electronics Controllers and Converters, Volume 3, Issue 2, Pages 13-25, 2017/12/30 |
| 3.   | Mr. N. Prabakaran           | A. Rini Ann Jerin, K. Palanisamy and S. Umashankar | Integration of single phase reduced switch multilevel inverter topology for grid connected photovoltaic system                             | Energy Procedia Vol.: 138, pp.1177-1183, 2017   |
| 4.   | Mr. N. Prabakaran           | A. Rini Ann Jerin, K. Palanisamy and S. Umashankar | FRT Capability in DFIG Based Wind Turbines using DVR with Combined Feed-forward and Feed-back control                                      | Energy Procedia Vol.: 138, pp.1184-1189, 2017   |
| 5.   | Dr. Rajkamal R              | Anitha Karthi and Poomanirajan M                   | Smart Health Surveillance with Automated Database Using Android Mobile Device  | Brazilian Archives of Biology and Technology, Vol. 60, 2017   |
| 6.   | Dr. Rajkamal R              | Anitha Karthi                                      | Analysis of PWM Techniques for Inverters Driving AC motors   | Pertanika Journal of Science and Technology, Vol.25, Issue 5, 2017  |
| 7.   | Dr Anbarasan                | R. Jayaprakash                                     | Supplementary Electrical Power Generation from Waste Heat Recovery   | Journal of Advanced Research in Dynamical and Control Systems, Vol.9, Sp-6, 2017                                  |
| 8.   | Dr.M.Vaigundamoorthi        | Dr R.Ramesh  | Implementation and Chaotic PWM control of Cuk DC-DC Converter based MPPT for solar PV system   | Journal of Electrical Engg, Volume 3, article 32, 2017 , PP-1-8   |
| 9.   | Dr. S. Mohan Krishna        | J. L. Febin Daya and C Kamal Basha                 | Real-Time Analysis of a Nonlinear State Observer with Improved Disturbance Compensation for Sensorless Induction Motor                     | International Journal of Intelligent Engineering Informatics, pp 657-668, 11 April 2018                           |



|    |                          |  |   |  |
|----|--------------------------|--|---|--|
| 10 | Dr. K. Arulkumar         | D. Vijayakumar, K. Palanisamy  | Design of Optimal LLCL Filter with an Improved Control Strategy for Single Phase Grid Connected PV Inverter | International Journal of Power Electronics and Drive System (IJPEDS), Vol. 9, No. 1, March 2018, pp. 114~125                       |
| 11 | S. Mohan Krishna         | Jestin Jayan and Febin Daya J.L                                      | A Novel Sensorless control scheme for BLDC motors used in Electric Vehicle                                  | ISSN 1 746-7233, England, UK World Journal of Modelling and Simulation Vol. 14 (2018) No. 3, pp. 209-216                           |
| 12 | Dr.Rajendra Prasad Narne | Venkata Ratnam kolluru   | Implementation of a novel P&O MPPT controller for Photo Voltaic Systems at Standards test Conditions        | International journal of pure and applied mathematics  |
| 13 | Dr. M.Chakkarapani       | V.Chandrasekar, M.Jaya Bharata Reddy,G.sravana Ilango and C.Nagamani | Enhanced Power Output from the PV with low input Ripple DC-DC Converter                                     | International Journal on Electric Power Components & Systems (Taylor & Francis Publications), Accepted for Publication, March 2018 |

## Student News

### Student Achievements

| S. No. | Student Name       | Name of the Event Participated   | Date       | Event Organized by                            |
|--------|--------------------|----------------------------------|------------|---|
| 1.     | M. Meghana         | GMOCS-2019 (Paper Presentation)  | 02-04-2019 | Madanapalle Institute of Technology & Science |
| 2.     | M. Meghana         | GMOCS-2019 (Poster Presentation) | 02-04-2019 | Madanapalle Institute of Technology & Science |
| 3.     | N. Mounika         | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 4.     | K. Chandra sekhar  | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 5.     | K. Divija          | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 6.     | B. Arun Kumar      | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 7.     | D. Sai Sumanth     | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 8.     | B. Reddy Kushal    | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 9.     | E. Md. Sajeed      | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 10.    | H. Vamsi           | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 11.    | T. Subhash         | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 12.    | D. Chandu          | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 13.    | P. C. Swapna Priya | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 14.    | N. Gowtham         | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 15.    | K. Chandra Sekhar  | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 16.    | P. Udaya Bhanu     | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 17.    | Sai Priya          | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 18.    | P. Abhishek        | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |
| 19.    | M. Devan Dilip     | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science |

|     |                         |  |            |  |
|-----|-------------------------|--|------------|--|
| 20. | P. Bhavya Sree          | PHOTON-2019 (Paper Presentation)   | 15-04-2019 | Madanapalle Institute of Technology & Science                                  |
| 21. | S. Mohammed Shoyab      | GMOCS-2019 (Paper Presentation)  | 02-04-2019 | Madanapalle Institute of Technology & Science                                  |
| 22. | E. Mohammad Sajeed      | TERA-2K19 (Paper Presentation)   | 16-04-2019 | Madanapalle Institute of Technology & Science                                  |
| 23. | N. Mounika              | PHOTON-2019 (Paper Presentation)   | 15-04-2019 | Madanapalle Institute of Technology & Science                                  |
| 24. | P. Haritha              | PHOTON-2019 (Paper Presentation)   | 15-04-2019 | Madanapalle Institute of Technology & Science                                  |
| 25. | K. Vinay Kumar          | International Conference On Signal Processing, VLSI and Communication Engineering (ICSPVCE-2019 (Paper Presentation)             | 20-05-2019 | Delhi Technological University   |
| 26. | G. S. Sreehari          | IEEE International Conference on Computation of Power, Energy, Information and Communication (ICCPEIC-2019) (Paper Presentation) | 27-03-2019 | Adhiparasakthi Engineering College, Tamil Nadu                                 |
| 27. | G. S. Sreehari          | IEEE 3rd International Conference on Computing Methodologies and Communication (ICCMC-2019) (Paper Presentation)                 | 28-03-2019 | Surya Engineering College (SEC), Coimbatore                                    |
| 28. | S. Vishnu Vardhan Reddy | 2nd International Conference on Paradigms in Engineering and Technology(ICPET-2018) (Paper Presentation)                         | 28-12-2018 | Methodist College Of Engineering And Technology, Hyderabad                     |
| 29. | P. Vasanthi             | 2nd International Conference on Paradigms in Engineering and Technology(ICPET-2018) (Paper Presentation)                         | 28-12-2018 | Methodist College Of Engineering And Technology, Hyderabad                     |
| 30. | M. Meghana              | ECO'M (Poster Presentation)  | 22-04-2019 | MITs Social Responsibility Club, Madanapalle Institute of Technology & Science |
| 31. | M. J. Sarafi Ahamed     | PHOTON-2019 (Poster presentation)  | 15-04-2019 | Madanapalle Institute of Technology & Science                                  |
| 32. | T. Naga Vani            | PHOTON-2019 (Oral presentation)  | 15-04-2019 | Madanapalle Institute of Technology & Science                                  |
| 33. | G. Manideep Sai         | Imagine To Innovate (Asian E- Bike Challenge)  | 01-03-2019 | Aditya Institute Of Technology & Management, Tekkali                           |
| 34. | V. C. V. Kalyan Kumar   | Imagine To Innovate (Asian E- Bike Challenge)  | 01-03-2019 | Aditya Institute Of Technology & Management, Tekkali                           |
| 35. | G. Vani                 | Imagine To Innovate (Asian E- Bike Challenge)  | 01-03-2019 | Aditya Institute Of Technology & Management, Tekkali                           |
| 36. | M. Sindhu               | TERA-2K19 (Project Expo- II Prize) (Drone)   | 16-04-2019 | Madanapalle Institute of Technology & Science                                  |
| 37. | G. Gowthami             | TERA-2K19 (Project Expo- II Prize) (Drone)   | 16-04-2019 | Madanapalle Institute of Technology & Science                                  |

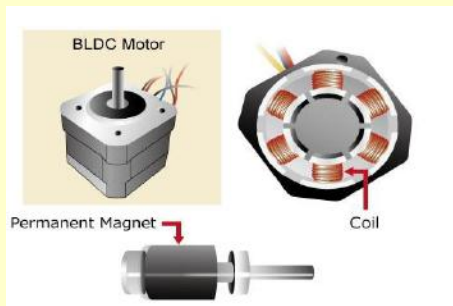
|     |                        |  |            |   |
|-----|------------------------|--|------------|---|
| 38. | G. Vani                | TERA-2K19 (Project Expo- III Prize) (E-Bike) | 16-04-2019 | Madanapalle Institute of Technology & Science   |
| 39. | M. Sindhu              | TERA-2K19 (Project Expo- III Prize) (E-Bike) | 16-04-2019 | Madanapalle Institute of Technology & Science   |
| 40. | M. Meghana             | PHOTON-2019 (Treasure Hunt)                  | 15-04-2019 | Madanapalle Institute of Technology & Science   |
| 41. | K. Mohammed Yazdan     | PHOTON-2019 (Oral Presentation)              | 15-04-2019 | Madanapalle Institute of Technology & Science   |
| 42. | S.Sai Sharvani         | Technology and Career Conference             | 06-10-2018 | Aliens Fest 3.0 the Transformation, BITS Pilani, Hyderabad                                |
| 43. | S. Akbar               | Technology and Career Conference             | 06-10-2018 | Aliens Fest 3.0 the Transformation, BITS Pilani, Hyderabad                                |
| 44. | G. VeenaVyshnavi       | Technology and Career Conference             | 06-10-2018 | Aliens Fest 3.0 the Transformation, BITS Pilani, Hyderabad                                |
| 45. | G.Vijaykumar           | GATE Examination 2019 (Rank-2288)            | 17-03-2019 | Graduate Aptitude Test in Engineering-2019  |
| 46. | Y. Charan Kumar Reddy  | GATE Examination 2019 (Rank-16498)           | 17-03-2019 | Graduate Aptitude Test in Engineering-2019  |
| 47. | R. Gowtham Kumar Reddy | GATE Examination 2019 (Rank-11745)           | 17-03-2019 | Graduate Aptitude Test in Engineering-2019  |
| 48. | G. Babu                | GATE Examination 2019 (Rank-12509)           | 17-03-2019 | Graduate Aptitude Test in Engineering-2019  |
| 49. | R. Reddy Prasad        | GATE Examination 2019 (Rank-17314)           | 17-03-2019 | Graduate Aptitude Test in Engineering-2019  |
| 50. | M. Meghana             | Shakespeare's Day (Skit Writing)             | 23-04-2019 | Department of English & Foreign languages (Madanapalle Institute of Technology & Science) |
| 51. | M. J. Sarafi Ahamed    | Shakespeare's Day (Skit Writing)             | 23-04-2019 | Department of English & Foreign languages (Madanapalle Institute of Technology & Science) |
| 52. | M. Sindhu              | Shakespeare's Day (Skit Writing)             | 23-04-2019 | Department of English & Foreign languages (Madanapalle Institute of Technology & Science) |
| 53. | P. Abhisek             | Shakespeare's Day (Skit Writing)             | 23-04-2019 | Department of English & Foreign languages (Madanapalle Institute of Technology & Science) |
| 54. | P. Abhisek             | Shakespeare's Day (Character Dortrapal)      | 23-04-2019 | Department of English & Foreign languages (Madanapalle Institute of Technology & Science) |
| 55. | S. Akbar               | Shakespeare's Day (Skit Writing)             | 23-04-2019 | Department of English & Foreign languages   |

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|-----|--------------------|--|------------|--|
|     |                    |  |            | (Madanapalle Institute of Technology & Science)  |
| 56. | .K Reddy Rani      | Shakespeare's Day (Skit Writing)       | 23-04-2018 | Department of English & Foreign languages<br>(Madanapalle Institute of Technology & Science) |
| 57. | N. Mounika         | Shakespeare's Day (Skit Writing)       | 23-04-2018 | Department of English & Foreign languages<br>(Madanapalle Institute of Technology & Science) |
| 58. | K. Mohammed Yazdan | Shakespeare's Day (Skit Writing)       | 23-04-2018 | Department of English & Foreign languages<br>(Madanapalle Institute of Technology & Science) |
| 59. | T. S. Leela Sundar | Shakespeare's Day (Skit Writing)       | 23-04-2018 | Department of English & Foreign languages<br>(Madanapalle Institute of Technology & Science) |
| 60. | S. Mohammed Shoyab | Shakespeare's Day (Skit Writing)       | 23-04-2018 | Department of English & Foreign languages<br>(Madanapalle Institute of Technology & Science) |
| 61. | E. Mohammad Sajeed | Shakespeare's Day (Skit Writing Prize) | 23-04-2019 | Department of English & Foreign languages<br>(Madanapalle Institute of Technology & Science) |
| 62. | A. Karthik         | Shakespeare's Day (Skit Writing Prize) | 23-04-2019 | Department of English & Foreign languages<br>(Madanapalle Institute of Technology & Science) |
| 63. | M. Meghana         | ECO'M (Best Out Of Waste)              | 22-04-2019 | MITS Social Responsibility Club,<br>Madanapalle Institute of Technology & Science            |

## Technical Articles

### POWER CONVERTER TOPOLOGY OF BRUSHLESS DC MOTOR FOR IMPROVEMENT OF POWER QUALITY

This study signifies different control schemes and design related power factor improvement technique used for brushless DC motor drives. It also provides a base for a range of a suitable power factor correction topology for the specified application. Several AC-DC Buck, Boost, cuk converters based power factor correction typologies are designed, modeled and analyzed to a 1.5 kW BLDC drive for the comparison of



performance. Portions of the bi-directional extension converter and unipolar inverter typologies are likewise surveyed to give a total evaluation of the power factor controller topologies for B The proposed PFC converter topologies show conformity to international power quality standards with improved performance of PMBLDCM drive, such as

reduction of AC mains current harmonics, near unity power factor and reduction of speed and torque ripples. A classified list of more than 200 research publications on the state of art of various PFC topologies and PMBLDCM drives is also given for a quick reference. The advancement in geometries and design innovations has made possible the use of PMBLDCM in many of the domestic, commercial and industrial applications. The boost PFC converter uses a DBR followed by a step up DC chopper with filtering and energy storage elements. Boost converters can also have various DC –DC converters with and without high-frequency transformer isolation that is boost. The buck – boost converter is a combination of diode rectifier with buck – boost DC –DC converters. Buck – boost converters are reported in Non isolated as well as isolated topologies with various names, such as buck – boost, fly back, SEPIC, Zeta, C etc. High frequency transformer isolation provides voltage adjustment for better control, safety of the motor, compactness, reduction in weight, size and losses; and suitability of the drive to various applications



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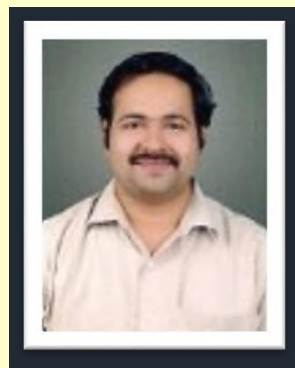
EEE Students got 51 offers in Reputed Companies through Campus Drive 2015-19 Batch.



Faculty Coordinators:



P. Balamurali Krishna,  
Asst. Professor



Dr. A. V. Pavan Kumar,  
Sr. Asst. Professor