

Currents

Issue. 3 July 2018-June 2019



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. (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. (IIEST, Shibpur)
17	Dr. Arijit Bardhan Roy	Sr. Asst. Professor	Ph.D. (IIEST, 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.) (IIT, Roorkee)
26	Mr. Vishwanatha Siddhartha	Asst. Professor	M.Tech., (Ph.D.) (IIT, Roorkee)
28	Ms. Pikaso Pal	Asst. Professor	M.Tech., (Ph.D.) (IITISM, Dhanbad)
29	Mr. Venkatachalam KM	Asst. Professor	M.Tech., (Ph.D.) (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

Symposium

Dept. of EEE organized a one-day National Level Technical Symposium “**Technofest on Electrical Revolutions & Advancements (TERA-2K19)**” on 16th April, 2019.



The program was inaugurated by Dr. G. Hampamma, Vice-Principal (Administration), and the Chief Guest **Sri Vinoth Sankar**, Senior R&D Engineer, ABB Innovation Center, Bengaluru, on 16.04.2019 at 10.30 AM. In the inaugural function the Convenor of TERA, Dr. Rajendraprasad Name, Associate professor/EEE given a brief opening remark about the symposium. The Head of the Department of EEE, Dr. M. A. Asha Rani welcomed all the dignitaries and participants of TERA-2K19. The Dean ECE & EEE discussed the innovative thoughts that changed the Electrical Engineering field to a great extent. He also shared the success story of an eminent scientist Robert William Kearns. Dr. G. Hampamma emphasized the need for the participation in technical symposium and discussed the importance of innovations in the era of new technology which can cater to the needs of the society. Dr. Lakshmanan S. A., Academic Head, EEE, introduced the chief guest to the audience by reading his brief profile. The chief guest motivated the participants with his thought-provoking speech on Industry 4.0. He motivated the young engineers to update their knowledge towards the current industrial technologies as well. Finally, the inaugural session came to a closure by the Vote of Thanks by Dr. A. V. Pavan Kumar, Sr. Assist. Professor-EEE.

Workshop

Dept. of EEE organized one day workshop on “**Practical Implementation of Microgrids**” on 21st July 2018.



Recently, Microgrids have earned numerous research interests due to their flexibility. They can provide high quality uninterrupted power supply to consumers with a capability to operate autonomously. Currently, several research groups across the globe are investigating the feasibility and benefits that microgrids may provide to the consumer. This workshop will give an insight knowledge about the practical implementation of microgrids. Also, this will enable the participants to be familiar with various concepts of microgrid which includes difficulties in implementation, operation, troubleshooting, maintenance and also recent developments.

Inaugurated the seminar by lighting the lamp. 37 participants attended the workshop. The Faculty from various colleges and students attended the workshop.

Dr. Debapriya Das Professor, School of Electrical Engineering, IIT Kharagpur discussed about “Overview of Microgrids” he mentioned details about the conventional grid, drawback of existing centralized grid system and necessity of Microgrids for rural electrification also he discussed about the basic component of automation, necessity of automation, challenges in automation, efficient method of power utilization and street light automation.

Guest Lectures

Dept. of EEE organized a guest lecture on "**Practical Applications and Future Industry Needs/ Importance of Power Electronics**" on 27th September 2018.



Dr. Pavana Kumar, Simlife Electric Private Limited, Bangalore, an Industry Expert in the area of Power Electronics was the resource person for the event. Dr. Pavana Kumar pursued PhD in Power electronics from IIT, Madras in 1980 and Started Multiple Centers of Excellence (COE) for GE, APC, Bloom, Schneider electric, SunEdison and Infineon which resulted in 100s of Millions of USD worth products Designed and Manufactured every year in India. He is a well-known industrialist and consultant with more than 35 years experience in the area of Processor based Designs of UPS, Drives, SMRs, Fuel Cells, energy meters, Solar Inverters, Design for six sigma and DMAIC of six sigma, and other power electronic equipment's using Simulation Tools like Saber, Matlab, Mathcad, Minitab, P-spice, etc. He has developed and introduced several new products Globally which includes 350VA – 40kVA UPS, DC and AC Drives, Energy meters / Ballasts / SMRs-12000A, String inverters-25kW -50kW, Solar inverters-100W- 50kW, SOFC Fuel cells, Wind Converterw-1.5MW etc.

The Program started by 10.45 a.m. with the welcome address by Dr. Asha Rani M. A. – HOD EEE Dept. and Coordinator of the Program. Further, Dr. P B N Prasad, Associate Director R&D given a special address and Dr. K. R. Kashwan- Dean EEE & ECE given the concluding remarks for the session.

Dept. of EEE organized a Guest Lecture on "**Career Guidance after Engineering**" on 2nd February 2019.



The guest lecture was started at 10 a.m. the resource person **Mr. REDDY SEKHAR**, was introduced by Dr. Asha Rani M A, 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. The importance of SWOT Analysis was explained in terms of planning career. The SWOT Analysis can help in reaching the goal by improving the weakness and finding the right opportunities. The success stories of few people such as Ajit Doval, Revu Mutyala raj, Roman Saini, Kunal Gurunani, Kunal Srivastava, Ashish Choudary were discussed to explain the job satisfaction. Information regarding Indian Engineering Services was shared. In detail discussion regarding central Govt. Sector Group – A, B, C and D were discussed. The students were enlightened on the National Scholarship Test. By clearing the test, a total scholarship amount of 5 Crores worth can be obtained as funding for further education or tuition fee. Core sectors jobs such as, Vijay Electricals, GE, HBL Power Systems, Siemens, Private power Plants.

Dept. of EEE organized a Guest Lecture on "**Role of Engineer in IT-Sector**" was organized on 2nd March 2019.



The Guest lecture started by 10 Am, the guest speaker **Mr. SANAULLA SHAIK**, Dr K R Kashwan, Dean ECE&EEE, Dr Asha Rani M A, HOD-EEE were invited to the dais. Dr K R Kashwan, Dean ECE&EEE addressed the students by enlighten them on the Role of An Engineer in various fields and enhanced the importance of the guest lecture. The guest speaker was introduced to the audience by Dr Asha Rani M A, HOD-EEE. The Resource person addressed the role and responsibility of an engineer in IT- Sector, day to day activities, various positions and High paid jobs in IT-Sector. Team Structure: Explained the team structure in terms of Support/Testing/Release Team and focused on the key aspects of working details. In which the role of System Engineers, SME (Subject Matter Expert), Team Lead, Manager were discussed. Development Team: Role of an engineer in development team such as Solution Designer, Developers, Architect, Team Lead, Manager can be obtained after completion of Engineering but with proper career planning and basic knowledge of programming with a positive attitude to learn a new dimension like Solution Designer, Frontend Developers, Backend Developers, Data Base, Full Stack Developers, Architect, Team Lead. Daily Activities of a Developer: 9 – 10 – Emails, 10 – 11 – To Do List / JIRA Dashboard, 11 – 11.30 – Scrum /Standup Meeting, 11.30 – 4 – Pull the Code from SCM and Start Coding, 4 -5 – Submit Code and Code Review.

Resources to learn new technology - Online teaching-learning platforms should be utilized to improve technical skills, Internships, Udemy, Edx, Free Code Camp, YouTube, Plural Sight, LinkedIn Learnings.

Practical Demonstration

Dept. of EEE organized a practical demonstration session on “**Hybrid Solar Inverter for PV Power Generation**” on 2nd November 2018 followed by the Interactive session with the faculty members and Govt. Officials of AP Government in the Board Room of MITS to create awareness on the latest technologies available for the PV power extraction and further for integration with the grid.



Dr. Pavana Kumar given a presentation about the various technologies available for solar PV power extraction with the merits of each of them. He also highlighted about the technologies he has developed for the same and he also suggested about the selection of topologies for power extraction based on location and demand. In addition, Dr. Mr. Sandeep Dama, Director-Quantum Energy Solutions Taiwan and one of the BOG Member of the institution was also present on the day. During his interaction with the faculty members he gave a presentation about the existing technologies available for Electric Vehicles and Energy Storage. He also mentioned about the future scope in this area as well. After the completion of the interaction session, Dr. Pavan Kumar and his team given a demonstration about how solar PV power can be extracted and can be integrated to the grid via Hybrid Solar Inverter.

Alumni Guest Lecture

Dept. of EEE organized a Alumni Guest Lecture on **Smart Grids**" was organized on 16th March 2019.



The Guest lecture started by 10 Am, the guest speaker **Mr. K. B. VENUGOPAL**, Dr K R Kashwan, Dean ECE&EEE, Dr Lakshmanan S A, Academic Head EEE, Dr P Ramesh Reddy, MITS Alumni Relation Officer were invited to the dais.

The Guest Speaker focused the presentation on Job opportunities in Core sector, Importance of Smart Grid, Software required to get employment in Smart Grid projects being carried in India.

Difference between Conventional Grid and Smart Grid: Highlighted the drawbacks in conventional grid and how these drawbacks are addressed with the help of smart grid technology. The drawbacks including power outage, inter connected power flow arrangement, auto reclosure of the circuit breakers in the distribution system. Smart Energy Meter: The key element in smart grid is smart meter. Which establishes connection or communication between power distributor and consumer. Based on the demand-supply the unit price of electricity is communicated to costumer. The costumer can choose based on the tariff to use all equipment in house or not to minimize the electricity bill. Different software's used in designing the smart grid project components. Explained the importance of learning software's such as AutoCAD, E3, E-Plan, Micro Station, E-Tap, CET as the future is smart substations and Digital Substations.

The session ended with an interaction with the students followed by felicitation to the Resource person.

World Energy Conservation Day

Dept. of EEE organized an awareness Program on “**World Energy Conservation Day**” on 14th December 2018.



Dr. Asha Rani M. A. – HOD EEE Dept. and Coordinator of the Program. Further, she presented a PPT about need for energy conservation and its importance in our day to day life with some case studies which includes electricity billing for a month in a residential building and also in a commercial building to create awareness about the amount we are unnecessary paying due to negligence.

Prof. Dr. G. Hampamma, Vice-Principal Administration, gave the Presidential Address and she enriched the audience with need for Energy Conservation and its importance with a few examples and advised the faculty and student community of MITS to take a pledge on the same day which is celebrated as Energy Conservation Day worldwide to save energy for the future.

Dr. K. R. Kashwan- Dean EEE & ECE given a special address to the participants to share his views on the day with an example of evolution of technology from huge chips and equipments taking a huge area to chips which can be inserted in finger tips and also about nanotechnology with an aim to conserve energy. Finally, the Research Head Dr. M. Ilampoornan shared his views and later the program came to a closure by the concluding remarks by the HOD EEE Department.

Almost 100 students of our Institute which includes B. Tech., M. Tech. and MCA students of MITS, and 20 of the faculty members got benefited with the course.

Faculty News

Ph.D. Awarded

Dr. Sudarshan swain, received his Ph.D. from NIT Rourkela on 28th Jun 2019 for his thesis entitled " Grid Synchronization Control Schemes for A Three Phase Grid Connected Photovoltaic System with Power Quality Disturbances".

Faculty Achievements

Dr. M. Vijay, appointed as Coordinator- Asian E- Bike Challenge 2019.

Dr. M. Vaigundamoorthi, Evaluated Ph.D. Thesis on the title "Simulation and Modelling of BLDC Drive Performance Using Conventional and Genetic Algorithm Based Tuning of PID Controller", received from St. Peter's Institute of Higher Education and Research.

Guest Lectures Delivered

Dr Ilampoornan M. K., delivered a Guest Lecture on "Travelling Waves on Transmission Lines and Computation of Transients" on 15-16 February 2019 at Velammal Engineering College, Chennai.

Dr. M. Chakkarapani, delivered a Guest Lecture on "Detecting partial shading and array faults in grid connected PV systems" as a part of the Five-day Workshop Solar Photovoltaic System Design and MPPT Implementation on 15-16 February 2019 at NIT, Tiruchirappalli.

Faculty Attended

Sl. No.	Faculty Name	Name of the Activity	Name of the program	From Date	To Date	Organized by	Venue
1.	Dr. Ilampoornan M. K.	Workshops	3D experience forum	04-09-2018	04-09-2018	Dassault systems	, Leela palace, Bengaluru
			NPTEL Workshop	12-09-2018	12-09-2018	IIT Madras	Kuppam engineering college, Kuppam
			Content Augmentation of NPTEL Online Courses	01-01-2019	02-01-2019	NPTEL	IIT Madras

		Guest Lectures Delivered	Travelling Waves on Transmission Lines and Computation of Transients	15-02-2019	16-02-2019	Velammal Engineering College, Chennai	Velammal Engineering College, Chennai
		Training	Four Day Induction Program	28-12-2018	01-01-2019	Instructors Training Division	MITS, Madanapalle
			Design and Developments of power electronics converters in Renewable energy conversion	21-06-2019	27-06-2019	AICTE Sponsored	R.M.K Engineering College, Tamilnadu
		MOOCS-FDP	Design of photovoltaic systems (Topper of 1% in this course)	01-07-2018	01-10-2018	AICTE- NPTEL	Online
			Electric Vehicles: Part 1	01-01-2019	01-04-2019	AICTE- NPTEL	Online
2.	Dr. C. Kamal Basha	Workshop	NBA&NAAC Accreditation Process For Technical Institutions	10-12-2018	14-12-2018	Share and Mentor Institutions (Margadarshana) Scheme, Sponsored by AICTE	M S Ramaiah Institute of Technology, Bengaluru
3.	Dr. Rajendra Prasad Name	Workshops	NBA/NACC Accreditation Process for Technical Institutions	11-02-2019	15-02-2019	Share and Mentor Institutions (Margadarshana) Scheme, Sponsored by AICTE	MITS, Madanapalle
			3rd Edition CII Energizing South	10-08-2019	11-08-2019	-	Hotel ITC Kakatiya, Hyderabad

			Conference on "India @ 75: Smart, Sustainable & Affordable Power"				
		FDP	Hybrid & Electric Vehicle Technologies	11-12-2018	15-12-2018	Dept. Of Mechanical Engineering	MVGR College of Engineering, Vizianagaram
			SCILAB	05-10-2018	06-10-2018	APSSDC	MITS, Madanapalle
		MOOCS-FDP	Electric Vehicles: Part 1 (Topper of 2% in this course)	01-01-2019	01-04-2019	AICTE- NPTEL	Online
4.	Dr. Suprava Chakraborty	MOOCS-FDP	Design of photovoltaic systems (Topper of 1% in this course)	01-07-2018	01-10-2018	AICTE- NPTEL	Online
			Non-Conventional Energy Resources (Topper of 1% in this course)	01-01-2019	01-02-2019	AICTE- NPTEL	Online
			Patent Drafting for Beginners (Topper of 5% in this course)	01-01-2019	01-02-2019	AICTE- NPTEL	Online
5.	Mr. K. Arul Kumar	Workshop	Adoption Promotion & Production of MOOCS for SWAYAM Platform	31-08-2018	31-08-2018	South Eastern Regional Office, University Grants Commission, Hyderabad	Maulana Azad National Urdu University, Hyderabad
		FDP	e - CONTENT DEVELOPME	14-12-2018	16-12-2018	FCMS, Sri Sri University In Association With National	Sri Sri University,

			NT, MOOCs and Moodle			Institute Of Educational Planning And Administration (NIEPA)	Cuttack, Odisha
		MOOCS-FDP	Design of photovoltaic systems	01-07-2018	01-10-2018	AICTE- NPTEL	Online
			Patent Drafting for Beginners	01-01-2019	01-02-2019	AICTE- NPTEL	Online
6.	Dr. M. Chakkarapani	FDP	Solar Photovoltaic System Design And MPPT Implementation	15-05-2019	19-05-2019	Dept. Of EEE	NIT, Tiruchirapalli
			Emerging power conversion techniques and challenges for Renewable energy and Electric vehicle applications	24-06-2019	28-06-2019	Dept. Of EEE	NIT, Tiruchirapalli
		Workshop	Implementation of Margadarshan Scheme (AICTE) for Mentee Institutions	30-11-2018	30-11-2018	NIT, Tiruchy	NIT, Tiruchirapalli
		Guest Lecture Delivered	Detecting partial shading and array faults in grid connected PV systems	15-05-2019	19-05-2019	Dept. Of EEE	NIT, Tiruchirapalli
		MOOCS-FDP	Design of photovoltaic systems	01-07-2018	01-10-2018	AICTE- NPTEL	Online

			Advanced Linear Continuous Control Systems: Applications with MATLAB Programming and Simulink (Topper of 1% in this course)	01-08-2018	01-10-2018	AICTE- NPTEL	Online
7.	Dr. Lakshmanan S. A.	Workshop	Outcome Based Learning in NBA / NAAC Evaluation	30-11-2018	01-12-2018	MITS, Madanapalle	MITS, Madanapalle
		FDP	Emerging power conversion techniques and challenges for Renewable energy and Electric vehicle applications	24-06-2019	28-06-2019	Dept. Of EEE	NIT, Tiruchirapalli
		Conference	CII Smart City Conference	29-01-2019	29-01-2019	Confederation Of Indian Industry	Hotel Grand Ridge, Tirupathi
		MOOCS-FDP	Design of photovoltaic systems	01-07-2018	01-10-2018	AICTE- NPTEL	Online
			Electric Vehicles: Part 1	01-01-2019	01-04-2019	AICTE- NPTEL	Online
8.	Dr. Hira Singh Sachdev	Workshop	Outcome Based Learning in NBA / NAAC Evaluation	30-11-2018	01-12-2018	MITS, Madanapalle	MITS, Madanapalle
		Training	Four Day Induction Program	28-12-2018	01-01-2019	Instructors Training Division	MITS, Madanapalle

		MOOCS-FDP	Non-Convention al Energy Resources	01-01-2019	01-02-2019	AICTE- NPTEL	Online
9.	Dr. Shubhashish Bhakta	MOOCS-FDP	Patent Drafting for Beginners (Topper of 1% in this course)	01-01-2019	01-02-2019	AICTE- NPTEL	Online
10.	Dr. Pavan Kumar A V	Workshops	NBA&NAAC Accreditation Process For Technical Institutions	10-12-2018	14-12-2018	Share and Mentor Institutions (Margadarshana) Scheme,Sponsored by AICTE	M S Ramaiah Institute of Technology, Bengaluru
			Outcome Based Learning in NBA / NAAC Evaluation	30-11-2018	01-12-2018	MITS, Madanapalle	MITS, Madanapalle
		FDP	SCILAB	05-10-2018	06-10-2018	APSSDC	MITS, Madanapalle
		Guest Lecture Delivered	Recent Trends In Electrical Distribution System With DG Interconnection (RTEDSDGI-18)	26-12-2018	30-12-2018	Narayana Engineering College, Nellore	Narayana Engineering College, Nellore
			Recent Developments In Renewable Energy Systems and Power Quality (RDRES & PQ) - 2018	29-06-2018	30-06-2018	Sreenidhi Institute of Science and Technology, Hyderabad	Sreenidhi Institute of Science and Technology, Hyderabad

			Smart Grid Technologies	08-06-2018	08-06-2018	Smart Grid Technologies (SGT-2k18)	Narayana Engineering College, Nellore
		MOOCS-FDP	Patent Drafting for Beginners (Topper of 5% in this course)	01-01-2019	01-02-2019	AICTE- NPTEL	Online
11.	Dr. Sumit Verma	MOOCS-FDP	Patent Drafting for Beginners	01-01-2019	01-02-2019	AICTE- NPTEL	Online
12.	Dr. Subhasish Mahapatra	Workshop	Introduction to Robotics	28-06-2018	29-06-2018	ERTS Lab, Dept of CSE, IIT Bombay	SV College of Engineering, Tirupathi
		Training Program	2018-2019 Special Topics in AI and IOT	03-01-2019	03-01-2019	-	Providence University, Taiwan
13.	Dr. M. Vijay	Workshop	Engineering Education Research	06-01-2019	06-01-2019	6 th International Conference On Transformations In Engineering Education	Malla Reddy Engineering College, Hyderabad
		MOOCS-FDP	Patent Drafting for Beginners	01-01-2019	01-02-2019	AICTE- NPTEL	Online
14.	Dr. Pratap Ranjan Mohanty	Training Program	Powering Andhra Pradesh Energy Innovation Summit 2019	05-02-2019	06-02-2019	A.P. Government	Vijayawada
15.	Dr. Parth Sarathi Panigrahy	Training	Four Day Induction Program	28-12-2018	01-01-2019	Instructors Training Division	MITS, Madanapalle
		MOOCS-FDP	Electric Vehicles: Part 1	01-01-2019	01-04-2019	AICTE- NPTEL	Online

16.	Dr. Arijit Bardhan Roy	Training	Four Day Induction Program	28-12-2018	01-01-2019	Instructors Training Division	MITS, Madanapalle
		MOOCS-FDP	Non-Conventional Energy Resources	01-01-2019	01-02-2019	AICTE- NPTEL	Online
17.	Dr. Soumya Ranjan Mahapatro	Workshop	Outcome Based Learning in NBA / NAAC Evaluation	30-11-2018	01-12-2018	MITS, Madanapalle	MITS, Madanapalle
		Training	Four Day Induction Program	28-12-2018	01-01-2019	Instructors Training Division	MITS, Madanapalle
18.	Dr. Pradosh Ranjan Sahoo	Short Term Course	Optimization and Estimation Techniques in Control Applications	12-06-2018	16-06-2018	Dept. of EEE	NIT, Rourkela
19.	Dr. Narendrababu A	Training Program	Powering Andhra Pradesh Energy Innovation Summit 2019	05-02-2019	06-02-2019	A.P. Government	Vijayawada
		MOOCS-FDP	Patent Drafting for Beginners	01-01-2019	01-02-2019	AICTE- NPTEL	Online
20.	B. Vijaya Kumar	MOOCS-FDP	Electric Vehicles: Part 1	01-01-2019	01-04-2019	AICTE- NPTEL	Online
21.	Sateesh Devanga Yerra	MOOCS-FDP	Electric Vehicles: Part 1	01-01-2019	01-04-2019	AICTE- NPTEL	Online
22.	P. Balamurali Krishna	Training	Photovoltaic System and DC Microgrids(PVSDCM-2018)	17-12-2018	21-12-2018	Andhra University, Visakhapatnam	
		MOOCS-FDP	Electrical Distribution	01-08-2019	01-09-2019	AICTE- NPTEL	Online

			System Analysis				
23.	Dr. A. Sudhakar	Workshop	Artificial Intelligence and Deep Learning	21-06-2018	23-06-2018	Leadingindia. ai, a nationwide initiative by Bennett University, Greater Noida	MITS, Madanapalle
		Training Program	ISO/IEC 17025:2017 Awareness	25-11-2018	25-11-2018	Zero Defect Consultants, Bangalore	MITS, Madanapalle
		Training Program	Machine learning using MATLAB	11-03-2019	13-03-2019	MathWorks Training Services	JNTUA, A. P.



Faculty Consultancy Services

S. No.	Faculty Members		Consultancy Project Carried Out	Contributions
	Name of the Faculty	Designation		
1	Dr. C. Kamal Basha	Professor	Energy Audit for Madanapalle Municipality (Electrical Power Measurement)	<p>1. Completed the energy auditing for the 80 bore wells out of 132.</p> <p>2. Recommended to replace the capacitor banks for p.f. maintenance.</p> <p>3. Recommended capacitor banks for the motors which are with having very low efficiency.</p> <p>4. Overall, this helped to reduce the municipality electricity bill by 8 lakhs per month.</p>
2	Dr. A. V. Pavan Kumar	Sr Assistant Professor		
3	Dr. Arijit Bardhan Roy	Sr. Assistant Professor		
4	Mr. M. Lokanatha	Assistant Professor		
5	Dr. Asha Rani M. A.	Associate Professor	Energy Audit for Madanapalle Municipality (Flow Measurement using Ultra Sonic Flow Meters)	<p>1. Initiated the process and tested the flow meter in the institute level.</p>
6	Dr. Subhasish Mahapathra	Sr Assistant Professor		
7	Dr. Pratap Ranjan Mohanty	Sr. Assistant Professor		
8	Dr. Prasadosh Ranjan Sahoo	Sr. Assistant Professor		
9	Dr. M. Chakkarapani	Associate Professor	Design of 20MW Solar Roof-Top Power Plant for Madanapalle Municipality	<p>1. Submitted the estimation & costing and detailed frame work for setting up the 20Mw solar power plant in the municipality premises.</p> <p>2. Also, submitted the payback period analysis.</p>
10	Dr. Arijith Bhardan Roy	Sr. Assistant Professor		
11	Dr. G. Dileep	Sr. Assistant Professor		
12	Dr. Suprava Chakkaraborthy	Associate Professor		

Details of the faculty members and students involved in the Energy Auditing Work for Madanapalle Municipality

S. No.	Faculty Members Guided		Students Involved		Contributions
	Name of the Faculty	Designation	Student Roll No.	Student Name	
1	Dr. C. Kamal Basha	Professor	15691A0280	Venkatesulu. N	1. Learned how to carry out energy auditing in a real time system. 2. Based on this completed their final year project also. 3. Three of the students got placed in CTS because of this project itself.
			16695A0233	Jaffer Shareef. S	
2	Dr. A. V. Pavan Kumar	Sr Assistant Professor	15691A0282	Vijay Kumar. H	
			16695A0219	Saikumar.M	
3	Dr. Arijit Bardhan Roy	Sr. Assistant Professor	16695A0234	Shaik Farooq.G	
			16695A0236	S. Bala Prakash	



Faculty Publications

S.No	Faculty Name	Co-Author	Paper/Book title	Publisher
1.	Dr. P. Chandra Babu Naidu	Dr. M. Sreedevi	An Innovative Graded Snip Discovery protocol for Secure Data Transmission in multi hop path Networks	International Journal of Pure and Applied Mathematics, Vol. 118, Issue 17, pp. 935-948, February 2018
2.	Dr. A.V.Pavan Kumar	Alivelu M Parimi and K Umar Rao	Tie-Line Frequency Bias Control Of Pv-Wind Hybrid Power System For Micro Grid Application	University Politehnica Of Bucharest Scientific Bulletin Series C-Electrical Engineering And Computer Science, Vol. 80, Issue 1, pp. 217-230, January 2018
3.	Dr. M A Asha Rani	S Priyavarthini, C Nagamani and GS Ilango	An improved control for simultaneous sag/swell mitigation and reactive power support in a grid-connected wind farm with DVR	International Journal of Electrical Power & Energy Systems 101, 38-49, October 2018
4.	Dr.N. Prabaharan	V. Arun, T. Chinnadurai, K. Arulkumar, A. Rini Ann Jerin and K. Palanisamy	Analysis of Symmetric Multilevel Inverter using Unipolar Pulse Width Modulation for Photovoltaic Application	Comptes rendus de l'Académie bulgare des Sciences. Vol.71, No.2, pp.252-260, 2018
5.	Dr.N. Prabaharan	Chinnadurai T, N. Mohan Raj and M. Karthigai Pandian	Ultrasonically Welded and Non-Welded Polypropylene and PC/ABS Blend Thermal Analysis	Journal of Thermal Analysis and Calorimetry. Vol. 132, No. 3, pp. 1813-1824, 2018
6.	Mr. Garimella Raghu Chandra	K.V. Nagesha and 3Vedala Rama Sastry	Image Processing based Assessment of Blast Performance in Opencast Mines – Case Studies	Image Processing, Pages 21-28, Publisher McGraw-Hill Education
7.	Dr.N. Prabaharan	A. Hina Fathima, K. Palanisamy, Saad Mekhilef, Akthar Kalam, Jackson Justo	Hybrid-Renewable Energy Systems in Microgrids	Woodhead Publishing Series in Energy, Elsevier Publications, June 2018, ISBN: 978-0-08-102493-5
8.	Dr.N. Prabaharan	E. Najif	Multilevel inverters for photovoltaic energy systems in hybrid renewable energy systems	Hybrid-Renewable Energy Systems in Microgrids, Woodhead Publishing Series in Energy: Elsevier Publications, Ch. No.: 5, pp. 81-96, June 2018, ISBN: 978-0-08-102493-5
9.	Dr.N. Prabaharan	A. Rini Ann Jerin, E. Najifi, K. Palanisamy	An overview of control techniques and technical challenges for inverters in micro grid	Hybrid-Renewable Energy Systems in Microgrids, Woodhead Publishing Series in Energy: Elsevier Publications, Ch. No.:6, pp. 97-107, June 2018, ISBN: 978-0-08-102493-5
10.	Dr.N. Prabaharan	A. Rini Ann Jerin, Nallapaneni Manoj Kumar, K.Palanisamy,S	Smart Grid and Power Quality Issues	Hybrid-Renewable Energy Systems in Microgrids, Woodhead Publishing Series in Energy: Elsevier Publications. Ch. No.: 10, pp. 195-202, June 2018, ISBN: 978-0-08-102493-5

		.Umashankar, Pierluigi Siano		
11.	Dr.N. Prabaharan	S. Saravanan and N.Ramesh Babu	DC-DC converters for Renewable Energy Applications in Recent developments in modeling and control of smart grid systems	Smart Grid Systems Modeling and Control, Apple Academic Press, Ch.No.:5, June 2018, ISBN 9781771886253
12.	Dr.P.Chandra babu	M.subba rao Ch.Saibabu and S.Satyanaraya na	Digital Fuzzy Current Mode Controlled Integrated PFC Converter with External Ramp Compensation	Journal of Circuits, Systems and Computers,Vol. 27, No. 09, 1850147 (2018)
13.	Dr.D.Dhanalaksh mi	kannanS and Gnanadas R	Generator reactive power pricing for practical utility system using power flow tracking method	International Journal of Engineering & Technology, Vol. 7, No.1.8 (2018) pp. 20-25
14.	Dr. Arijit Bardhan Roy	Jayasree Roy Sharma, Gourab Das and Sumita Mukhopadhy a	Design Analysis of Heterojunction Solar Cells with Aligned AZO Nanorods Embedded in p-type Si wafer	Silicon pp 1–12, Springer, Accepted on 12 March 2019
15.	Dr. Pradosh Rajan Sahoo	Jitendra Kumar Goyal, Sandip Ghosh , Asim Kumar Naskar	New results on restricted static output feedback H ∞ controller design with regional pole placement	ISSN 1751-8644, IET Control Theory & Applications, doi: 10.1049/iet- cta.2018.6138.
16.	Dr. Sudarshan Swain	Bidyadhar Subudhi	Iterated extended Kalman filter-based grid synchronisation control of a PV system	IET Energy Systems Integration, eISSN 2516-8401, Accepted on 30th May 2019
17.	Dr Aurobinda Bag	Prof Bidyadhar Subudhi, Prof. Pravat Kumar Ray	An Adaptive Variable Leaky Least Mean Square Control Scheme for Grid Integration of a PV System	IEEE Transactions on Sustainable Energy
18.	Dr. Subhasish Mahapatra	Bidyadhar Subudhi	Nonlinear H ∞ control of autonomous underwater vehicles, Publication date April 2019	Navigation and Control of Autonomous Marine Vehicles,2019
19.	Dr. Narendrababu A	N. Yalla and P. Agarwal	A New Three Phase Multi- Point Clamped 5L-HPFC With Reduced PSD Count and Switch Stress	IEEE Transactions on Industrial Electronics

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

				(Madanapalle Institute of Technology & Science)
56.	.K Reddy Rani	Shakespeare's Day (Skit Writing)	23-04-2018	Department of English & Foreign languages (Madanapalle Institute of Technology & Science)
57.	N. Mounika	Shakespeare's Day (Skit Writing)	23-04-2018	Department of English & Foreign languages (Madanapalle Institute of Technology & Science)
58.	K. Mohammed Yazdan	Shakespeare's Day (Skit Writing)	23-04-2018	Department of English & Foreign languages (Madanapalle Institute of Technology & Science)
59.	T. S. Leela Sundar	Shakespeare's Day (Skit Writing)	23-04-2018	Department of English & Foreign languages (Madanapalle Institute of Technology & Science)
60.	S. Mohammed Shoyab	Shakespeare's Day (Skit Writing)	23-04-2018	Department of English & Foreign languages (Madanapalle Institute of Technology & Science)
61.	E. Mohammad Sajeed	Shakespeare's Day (Skit Writing Prize)	23-04-2019	Department of English & Foreign languages (Madanapalle Institute of Technology & Science)
62.	A. Karthik	Shakespeare's Day (Skit Writing Prize)	23-04-2019	Department of English & Foreign languages (Madanapalle Institute of Technology & Science)
63.	M. Meghana	ECO'M (Best Out Of Waste)	22-04-2019	MITs Social Responsibility Club, Madanapalle Institute of Technology & Science
64.	P. Abhisek	Delegeate Participation, Annual Business and Entrepreneurship	01-01-2019	Entrepreneurship Development Cell, IIT Delhi
65.	P. Abhisek	New University Innovation Fellow Training	21-03-2019	Silicon Valley, Stanford University
66.	B. Sai Reddy	Japan Habba Tech Fair 2019 (Participated)	02-02-2019	IISC-IISC Student Branch, IISC, Bangalore
67.	C. Bharath Kumar Reddy	Japan Habba Tech Fair 2019 organized by IEEE-IISC	02-02-2019	Indian Institute of Sciences, Bangalore, India
68.	P. Mohammad Ismail	IISC Open Day	20-03-2019	IISC, Bangalore
69.	B. Sunil Kumar	IISC Open Day	20-03-2019	IISC, Bangalore
70.	K. Harshavardan	IISC Open Day	20-03-2019	IISC, Bangalore
71.	G. Saisreekar	IISC Open Day	20-03-2019	IISC, Bangalore

72.	P. Venkat Ramana	IISC Open Day	20-03-2019	IISC, Bangalore
73.	S. Sai Sharvani	IISC Open Day	20-03-2019	IISC, Bangalore
74.	G. Kavya	IISC Open Day	20-03-2019	IISC, Bangalore
75.	M. Hariprasad	IISC Open Day	20-03-2019	IISC, Bangalore
76.	A. Karthik	Best Innovative idea for Entrepreneurship (EDC)	18-04-2019	Madanapalle Institute of Technology & Science
77.	G. Sai Pavan	IUCEE SCALE AP Consortium Regional Student Workshop 2018,APSSDC	27-09-2018	Madanapalle Institute of Technology & Science
78.	A. Karthik	IUCEE SCALE AP Consortium Regional Student Workshop 2018,APSSDC	27-09-2018	Madanapalle Institute of Technology & Science
79.	M.Sugreev	Workshop (Swarm Robotics)	30-09-2018	Sree Vidyanekathen Educational Institutions
80.	S. Zeashan Ali	Workshop (Solar & Smart Energy)	30-09-2018	Sree Vidyanekathen Educational Institutions
81.	.S. Zeashan Ali	Technology and Career Conference	06-10-2018	Aliens Fest 3.0 the Transformation, BITS Pilani, Hyderabad
82.	T. Subhash	Online Course (Solar Energy Technology: Fundamentals and Applications)	31-07-2018	National Power Training Institute, Faridabad
83.	Risma	Ineternship (Power Systems)	24-06-2019	National Power Training Institute, Bangalore
84.	. A. Jyothsna	Mini Project (Overall Process of Therma Power Plant of RTPP)	03-01-2019	APGENCO,Rayalaseema Thermal Power Project,Kadapa(DIST)
85.	R. Deepthi	Mini Project (Overall Process of Therma Power Plant of RTPP)	03-01-2019	APGENCO,Rayalaseema Thermal Power Project,Kadapa(DIST)
86.	S. Akbar	Ineternship (Power Systems)	24-06-2019	National Power Training Institute, Bangalore
87.	A. Karthik	Internship (Modelling and performance study of photovoltaic module)	31-07-2018	National Institute of Technology, Tiruchirappalli
88.	P. Abhishek	Internship (Project Expert- Connect)	04-07-2018	StudyOwl Education Private Limited
89.	M. Sindhu	Ineternship (Power Systems)	24-06-2019	National Power Training Institute, Bangalore
90.	M. Meghana	Cambridge English Entry Level Certificate in ESOL (Entry 2) (Business)	03-06-2019	Cambridge Assessment English

91.	M J Sarafi Ahamed	Cambridge English Entry Level Certificate in ESOL (Entry 3) (Business Preliminary)	03-06-2019	Cambridge Assessment English
92.	S Mohammed Shoyab	Cambridge English Entry Level Certificate in ESOL (Entry 2) (Business)	03-06-2019	Cambridge Assessment English
93.	P. Abhisek	Case Study Competition	01-01-2019	Entrepreneurship Development Cell, IIT Delhi
94.	A. Karthik	TERA-2K19 (Organizing Member)	16-04-2019	Madanapalle Institute of Technology & Science
95.	C. Bharath Kumar Reddy	TERA-2K19 (Organizing Member)	16-04-2019	Madanapalle Institute of Technology & Science
96.	K. Bramhaiah	TERA-2K19 (Organizing Member)	16-04-2019	Madanapalle Institute of Technology & Science
97.	R. Deepthi	TERA-2K19 (Organizing Member)	16-04-2019	Madanapalle Institute of Technology & Science
98.	M. Sindhu	TERA-2K19 (Organizing Member)	16-04-2019	Madanapalle Institute of Technology & Science
99.	S Sai Pavan	TERA-2K19 (Organizing Member)	16-04-2019	Madanapalle Institute of Technology & Science
100.	G. Vani	Design and Development of E-Mobility Vehicles (Organizing Member)	21-12-2018	Madanapalle Institute of Technology & Science
101.	C.C.Vijaya Kumar Reddy	ASHV-2K19 (The Test Sports Coordinator)	15-02-2019	Madanapalle Institute of Technology & Science
102.	R. Deepti	Intramural Sports-19 (Tenni Koit-Runners)	01-03-2019	Madanapalle Institute of Technology & Science
103.	B. Vishnu Vardhan Naik	selesta 2K19 (Kho- Kho- Runners)	01-02-2019	SV College Of Engineering & Technology, Tirupathi
104.	G. Sai Pavan	Combined Annual Training CAMP (CATC)-X111	17-10-2018	PVKN Government College, Chittoor
105.	G. Sai Pavan	Combined Annual Training camp-XIV	16-02-2019	NCC Nagar, Tirupathi
106.	S. Zeashan Ali	NCC B Certificate	09-05-2019	BN NCC Chittoor
107.	S. Zeashan Ali	Combined Annual Training camp-III	19-06-2019	PVKN Government College, Chittoor
108.	B Arun Kumar	NCC B Certificate	09-05-2019	BN NCC Chittoor
109.	R. Deepthi	NCC B Certificate	09-05-2019	BN NCC Chittoor
110.	N. Mounika	Combined Annual Training camp-III	19-06-2019	PVKN Government College, Chittoor

Smart India Hackathon Projects

List of students undergoing SHARP program in EEE Department

Name of the Faculty Mentor	II year		III year	
	Name	Roll no.	Name	Roll no.
Dr. Ilampoornan	B. Jalaja	17691A0232	Shaik Seema Bakthiyar	16691A0249
Dr. M. Vaigundamoorthi	Nil		Sai Sreelatha	16691A0244
Dr. Rajendra Prasad Narne	Nil		Vijay Kumar Reddy.S	16691A0260
Dr. C. Kamal Basha	B. Arun kumar	17691A0203	K. Vyshnavi	16691a0259
Dr. A. Sudhakar	Akula Satheesh kumar	17691A0284	Vishnuvardhan G.	17695A0250
Dr. Asha Rani M. A.	Harsha Vardhan Reddy J	17691A0228	V. Tulasi Krishna	17690a0208
Dr. Suprava Chakraborty	K. Divija	17691A0215	Srinivasulu. K	17695A0258
Dr. K. Arul Kumar	G. Pavithra	17691A0267	P.C Swapna Priya	16691a0253
Dr. Lakshmanan S. A.	Bhanu Prakash Reddy. C	17691A0210	Diwakar Reddy. C	16699A0204
Dr. M. Chakkarapani	Bramhahih	18695A0218	Akkenalaguntla Kartik	17690A0215
Dr. Hira Singh Sachdev	P. Greeshma	17691A0223	A. Kusuma	16691A0223
Dr. A. V. Pavan Kumar	Nil		Sai Varun	16691A0246
Dr. Sumit Verma	G. Gowthami	17691A0222	P. Arshiya banu	17695a0203
Dr. Subhasish Mahapatra	Vani. G	17691A02A4	M N Nikhil	16699A0209
Dr. Arijit Bardhan Roy	R. DEEPTHI	17691A0213	Nil	
Dr. M. Vijay	Kavya. G	17691A0237	Neeharika	17695A0221
Dr. Pradosh Ranjan Sahoo	Sai Yaswanth. B	17691A0282	Jaswanth kumar reddyEEE	16699A0205
Dr. Aurobinda Bag	Nil		S. Mohammed Javeed	16691A0229
Dr. Parth Sarathi Panigrahy	B. Vimala	17691A02B0	Rohit kumar P	17690A0218
Dr. Pratap Ranjan Mohanty	C. Harshavardhan Raju	18695A0216	B. Kasiviswanath Reddy	16691A0266
Dr. Soumya Ranjan	G. Veena Vyshnavi	17691A02A6	Vijay Kumar Reddy.c	17690A0209

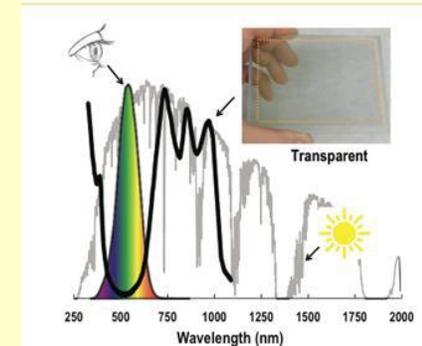
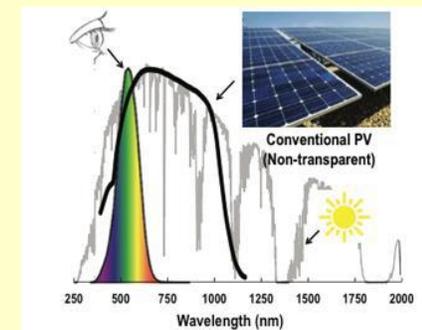
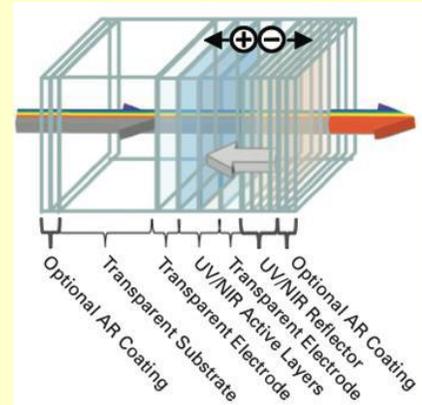
Transparent Photovoltaic Cell

Transparent Solar Cell - A window of future

MIT researchers are making transparent solar cells that could turn everyday products such as windows and electronic devices into power generators—without altering how they look or function today. Their new solar cells absorb only infrared and ultraviolet light. Visible light passes through the cells unimpeded, so our eyes don't know they're there. Using simple room-temperature methods, the researchers have deposited coatings of their solar cells on various materials and have used them to run electronic displays using ambient light. They estimate that using coated windows in a skyscraper could provide more than a quarter of the building's energy needs without changing its look. They're now beginning to integrate their solar cells into consumer products, including mobile device displays.

To explain the operation of this solar cell, the researchers measured its absorptive response and then compared it with that of a conventional solar cell. The results appear beside. In each case, the absorptive response (black curve) is superimposed on the solar spectrum (gray curve). In the conventional cell (top), the wavelengths at which absorption is relatively high include the visible part of the spectrum that our eyes can detect (the colored section between about 400 and 700 nanometers). In contrast, the transparent cell (bottom) absorbs well in the near-infrared and the ultraviolet parts of the spectrum—both above and below the visible range. But in the visible region, absorption drops off, approaching zero.

The efficiency of the fully transparent solar panels is currently about 1% with an estimated potential of 5%. Compared to the average efficiency of 15% for conventional solar panels, efficiencies of 5% and 7.2% for the fully and partially transparent panels respectively are still quite low.

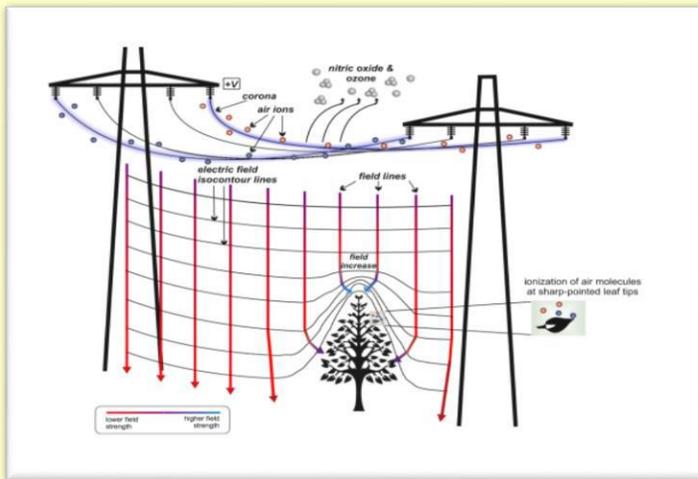


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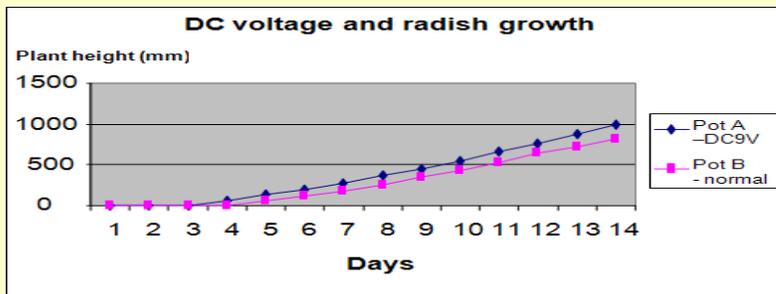
Effect of electricity on growth and development of plant species

A number of investigations had been carrying on abiotic elicitation of plant responses like with UV-B radiation, temperature, drought, CO₂, nutrients, heavy metals and wounding in the agronomic sector and are described in various reviews. However, it is not clear if electricity can be classified as an abiotic stress elicitor to affect plants and the study of this is called as electro culture. Electro culture involves the study of the effects of electricity and electric fields on the rate of seed germination and plant growth. Researchers are starting to find the evidence of plant growth can be enhanced by taking advantage of the sensitivity of plant cells to electric currents.



some of the observations had proved that certain types of grass appear healthier after a thunderstorm and grass that grows below an electric power cable appears healthier. It is also proved that when we apply D.C voltage of 9v to a radish plant by using copper rods for 5 minutes every day can make the

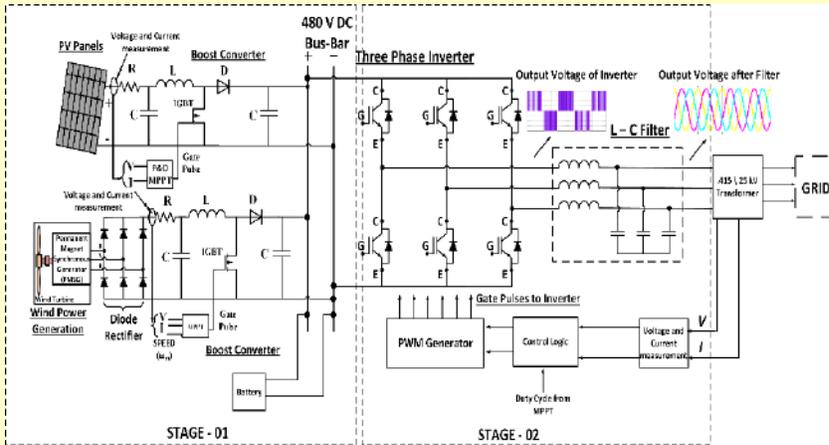
radish plant to grow more quickly than the other plant. The difference between the growth of two plants are shown by using a graph. In the same way researchers are carrying out on various plants by changing the intensity and the method of providing the electricity to the plant.



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MPPT controlled Grid-Tie Inverter for PV-Wind Hybrid Power System

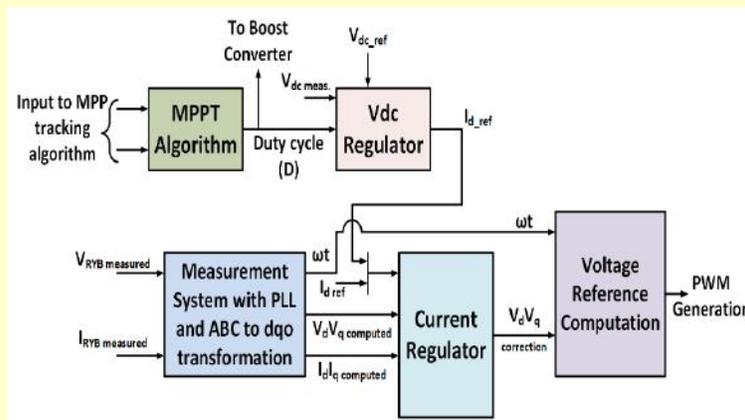
Photovoltaic (PV) and Wind based generation have experienced tremendous development in a recent decade, mainly because of increasing concern for climatic changes and oil prices, which has driven numerous nations to review new technologies to advance Renewable Energy Sources (RES) technology.



The RES power extracted beginning uncertain as the power is directly related to change in climatic conditions, thereby, the reliable and uninterrupted power supply cannot be extracted from one

type RES. However, this can be achieved by the combination of two or more RES selected based on geographical conditions to form Hybrid power generation. Solar PV and Wind-based power generation are most reliable, promising sources as the solar and wind energy resources are available daily and seasonally. The hybrid PV-Wind generation shown in Figure above is gaining importance, capable sources as compared to conventional generation.

A single stage grid integrated topology has more advantages, reliability and enhanced performance over two-stage topology for a single source PV generation system. Whereas a two-stage topology is advantageous for wind and PV generation under low or varying climatic conditions. The two-stage topology provides better frequency and power flow control as the frequency of the system is independent of wind speed and is totally controlled by the inverter.



The graphical representation of proposed Maximum Power Point Tracking (MPPT) based inverter control technique is shown in Figure. The inverter has two different control strategies: a Voltage regulator and current regulator control. The control

technique is implemented in the dq reference frame. The measurement plays an important role in the development of control logic of grid connected inverter. A Phase Lock Loop (PLL) is used to generate reference to control inverter output for grid synchronization.



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Plant Monitoring System: Drone (Regular Data Collection)

Multi-spectral imaging camera sensors on agricultural drones allow the farmer to manage crops, soil, fertilizing and irrigation more effectively. There are huge benefits both to the farmer and to the wider environment by minimizing the use of sprays, fertilizers, wastage of water and at the same time increasing the yield from crops. Multi-spectral camera remote sensing imaging technology use green, red, red-edge and near infrared wavebands to capture both visible and invisible images of crops and vegetation.

The multi-spectral images integrate with specialized agriculture software which outputs the information into meaningful data. This land telemetry, soil and crop data allow the grower to monitor, plan and manage the farm more effectively saving time and money along with reducing the use of pesticides. The system utilizes advanced micro-controller to feed a database that is currently collecting information on the best growing condition of every plant inside closed spaces. It will examine the soil condition, temperatures, light, and humidity with sensors that are connected to the system.



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



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