



Jan 2024-Dec 2024



#### Inside This Issue

EEE Dept. faculty

Events Organized

Faculty publication

Student News

The Department of Electrical & Electronics Engineering was established in the year 1998 and has been playing a vital role in producing value-based professionals ever since. The department offers an undergraduate program in Electrical & Electronics Engineering with an intake of 60 to cater to the ever-challenging needs of technical excellence in all areas such as Power systems, Control Systems, Power Electronics, Digital Signal Processing, Robotics & Drones, and in the emerging areas of electrical engineering such as Renewable Power Generation, Smart Grids, Electric & Hybrid Vehicles. The B.Tech. program under the department has been continuously accredited and re-accredited by the National Board of Accreditation (NBA) since 2013 and Under Tier-I in 2019. The most recent NBA accreditation, in 2022, was under TIER I.

The Department conducts regular seminars, guest lectures, workshops and technical symposiums on latest technologies for the benefit of student and faculty community.

The College Academic Council (AC) and Board of Studies (BoS) of the department strive to provide quality education with the most advanced curriculum for both UG and PG programmes with a vision to provide quality education to the students and make them excel in the domain of Electrical & Electronics Engineering.

With research proficiency, deep sense of commitment and ethics, the Department has a thriving research program with externally funded projects. Faculty are also engaged in providing engineering consultancy for industrial entities. The research output in terms of quality journal publications and patents, has been steadily increasing in recent years. The students of the department benefit from this thriving R&D culture which provides them with an exposure to the state-of-the-art research facilities and cutting-edge technologies to meet the industry requirements and challenges of society.

## 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, to find the suitable solutions in their respective domain, for

## 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 Principal

Technological information dissemination to the public is the key factor in bringing concerned people/Department together. The Department of Electrical and Electronics Engineering contributes 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 science and technology much stronger towards knowledge banks. 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 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. A V PAVAN KUMAR, Ph.D.**

*Head of the Department*

*Department of EEE*

## DETAILS OF EEE NEWSLETTER – CURRENTS

Chief Editor	Faculty Editors	Student Editors
Dr.A.V.Pavan kumar, Professor & Head of the Department EEE.	Mr.B.Vijayakumar, Assistant Professor, Dept Of EEE	Ch. Manohar -21691A0225 N. Nihanth Kumar- 22691A0225 T.Shravya-22691A0241
	Mr.Rajesh K S, Assistant Professor, Dept Of EEE	

### CONSOLIDATED DATA

S.NO	EVENT NAME	DATE
1	A One Day Entrepreneurship Development Program on "Company registration and Documentations to start a new Business"	01st February 2024
2	An Alumni Guest Lecture on “SRE and Data Science Opportunities in USA	02nd February 2024
3	One-week Short Term Course Program on “Big Data Analytics for Smart Grid”	12th & 16 <sup>th</sup> February 2024.
4	One-Day Expert Talk on “Beyond Boundaries:Design Thinking as the Catalyst for Innovation”	17th February 2024
5	For III Year Students An Industrial Visit to “Sathanur Hydro-Electric Power Station”	23th February 2024.
6	For II Year students An Industrial Visit to “Sathanur Hydro-Electric Power Station”	23th February 2024
7	An Alumni Guest Lecture on “Career Opportunities for Young Graduates in the Energy Sector”	29 <sup>th</sup> February 2024
8	One Day Expert Talk on “Intellectual Property Rights: Concept, Importance, and Its Role in Economic Growth”	29 <sup>th</sup> February 2024

<b>9</b>	An Alumni Guest Lecture on “Transition to IT Industry and Opportunities in Ireland”	21th March 2024
<b>10</b>	A One Day National Level Technical Symposium "TERA 2K24"	02 <sup>nd</sup> April 2024
<b>11</b>	An Online Guest Lecture on “Protecting innovation through IPR”	9 <sup>th</sup> May 2024
<b>12</b>	Organised A Two days Industrial Visit to Kaynes Technology, Mysuru, Karnataka	18 <sup>th</sup> & 19 <sup>th</sup> May 2024
<b>13</b>	An Online Expert Talk On “NEP 2020 Leading to an Outcome Based Curriculum”	01 <sup>st</sup> August 2024
<b>14</b>	An Alumni Guest Lecture on “Opportunities for EEE Students in Core companies”	6 <sup>th</sup> August 2024
<b>15</b>	An Alumni Students Interaction	7th August 2024
<b>16</b>	A One Week Community Outreach Program for ATL Schools “Innovators of Tomorrow: A Hands-On STEM and Creativity Program for Young Minds"	26th & 31st August 2024
<b>17</b>	An Industry Visit to POWERICA Limited, Bangalore for the Inspection of 500 kVA Diesel Generator (D.G.)	19th September 2024
<b>18</b>	A Guest Lecture on “Solar PV Integration: Hardware Design and Development”	20th September 2024
<b>19</b>	IEEE CASS Seasonal School titled “Neuromorphic Computing And Logic In Memory Computing Using Non-Volatile Memory Devices”	23th & 25th September 2024
<b>20</b>	An Online Guest Lecture “Smart Grid and Renewable Energy with AI Tools”	16th October 2024
<b>21</b>	A Parent - Teacher Meeting	25thOctober 2024
<b>22</b>	A One Day Industrial Visit to FANUC India Private Limited, Bangalore	27th November 2024



## EVENTS ORAGANISED

### EVENT-1

Department of Electrical & Electronics Engineering Organised A One Day Entrepreneurship Development Program on "Company registration and Documentations to start a new Business" on Date: 01.02.2024.

The programme is started at 10:00 AM with a welcome address to all the audience by the Ms. Revathy Gopinath, Assistant Professor, EEE, MITS, Madanapalle. The resource person was Dr. Prem Knowles S, ED Cell Coordinator, MITS. The resource person started the session by extending his hearty thanks to the participants, organising members for giving him opportunity to share his knowledge and experience in “Company registration and Documentations to start a new Business”.

**MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE**  
(UGC-AUTONOMOUS INSTITUTION)  
Madanapalle-517325, Annamayya Dist., Andhra Pradesh

Organized by Department of Electrical & Electronics Engineering

One-Day Entrepreneurship Development Programme on  
**"Company registration and Documentations to Start a New Business"**

**Resource Person**  
**Dr. Prem Knowles S**  
Coordinator – MITS, ED Cell

Date : 01/02/24 Time : 10.00 -12.00 PM

**Chief Patron**  
Dr. N. Vijaya Bhaskara Choudhary, Ph.D.,  
Secretary & Correspondent

**Patron**  
Mrs. Kavitha Reddy  
Executive Director

**Program Chair**  
Dr. C. Yamaiah  
Principal

**Co-Chair**  
Dr. A.V. Parvath Kumar  
Professor, HOD EEE

**Coordinator**  
Ms. Revathy Gopinath  
Assistant Professor  
Department of EEE

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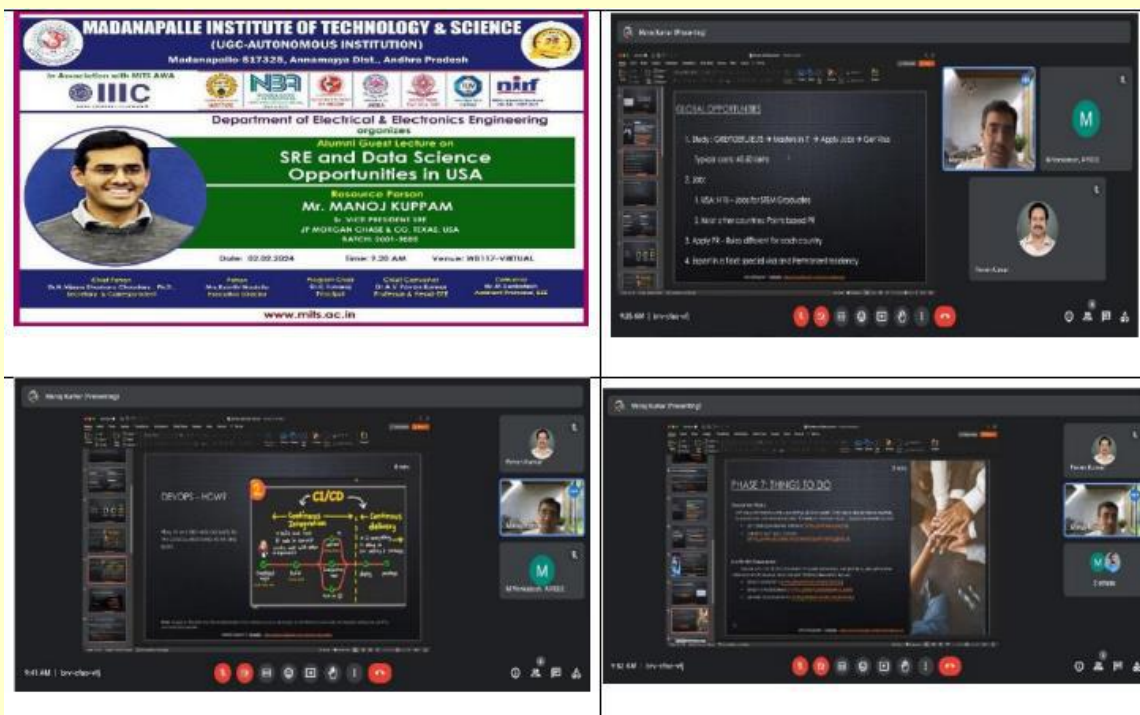




## **EVENT-2**

Department of Electrical & Electronics Engineering Organised An Alumni Guest Lecture on “SRE and Data Science Opportunities in USA” on Date: 02.02.2024.

The program is started at 9:15 AM with a welcome address to all the Participants and the resource person Mr. Manoj Kuppam, Sr Vice President SRE, JPMorgan Chase & Co, USA, by the Dr. A V Pavan Kumar, H.O.D, EEE, MITS, Madanapalle. The brief introduction to resource person was given by Dr. A V Pavan Kumar, H.O.D, EEE, after that session is handover to Mr. Manoj Kuppam, Sr Vice President SRE, JPMorgan Chase & Co, USA, The resource person started the session by extending his hearty thanks to the participants, organising members, HoD, Principal and Management of MITS Madanapalle for giving opportunity to share his knowledge and experience on “SRE and Data Science Opportunities in USA”. The topics were covered by resource person are related to the career opportunities in software industry based on SRE, DevOps and acquire knowledge to meet the corporate industries. The session started from the basic needs for getting job in software industry and it gone so far how to sustain in that, field.



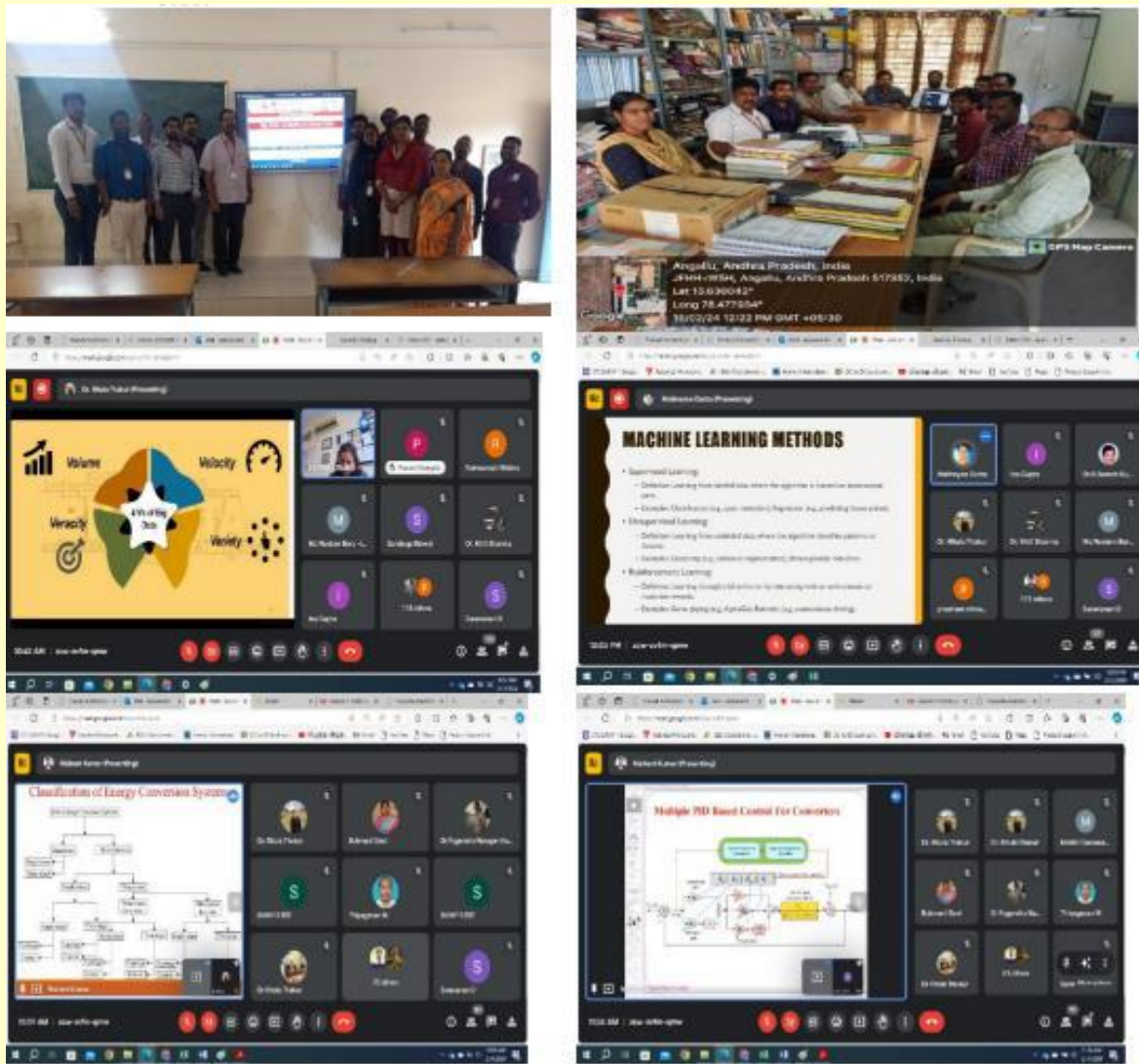
### EVENT-3

Department of Electrical & Electronics Engineering Organised One-week Short Term Course Program on “Big Data Analytics for Smart Grid” on Date: 12.02.2024 to 16.02.2024.

The online one-week STP was inaugurated on 12th February 2024 at 9:30 AM with a welcome address to all the audience by the Dr. A.V. Pavan Kumar HoD, EEE, MITS Madanapalle, and followed by inaugural address by Dr. Ritula Thakur, Associate Professor & Head, Electrical Engineering Department, NITTTR Chandigarh through google meet. The brief introduction about the FDP and the resource person was addressed by Mr. Saravanan D. The first session of the FDP was delivered by Dr. Ritula Thakur, Associate Professor, Electrical Engineering Department, NITTTR Chandigarh on the Topic “Introduction Smart Grid”. Key components of a smart grid discussed the session as follows Advanced Metering Infrastructure (AMI), Grid Automation, Distributed Energy Resources (DERs), Demand Response, Integration of Information and Communication Technology (ICT). Benefits of smart grids include:

- Improved reliability and resilience
- Increased energy efficiency and reduced waste through better management of electricity consumption.

- Integration of renewable energy sources, leading to a more sustainable
- Enhanced grid security and cybersecurity
- Empowerment of consumers.



#### EVENT-4

Department of Electrical & Electronics Engineering In Association with Institution Innovation Council (IIC) & IEEE-Student Chapter Organised One-Day Expert Talk on “Beyond Boundaries:Design Thinking as the Catalyst for Innovation”on Date: 17.02.2024.

The programme is started at 10:00 AM with a welcome address to all the audience by the Ms. Revathy Gopinath, Assistant Professor, EEE, MITS, Madanapalle. The resource



person was Dr. Gokul Gopan, Assistant Professor, Department of Mechanical Engineering, Saveetha School of Engineering, Chennai, Tamilnadu, India. The resource person started the session by extending his hearty thanks to the participants, organising members for giving him opportunity to share his knowledge and experience in “Beyond Boundaries: Design Thinking as The Catalyst For Innovation”.



## EVENT -5

Department of Electrical & Electronics Engineering organized An Industrial Visit to “Sathanur Hydro-Electric Power Station” on Date: 23.02.2024.

On 23 Feb 2024, a group of B.Tech. III Year/II Sem -EEE students from Madanapalle Institute of Technology, Madanapalle, Andhra Pradesh, embarked on an industrial visit to the Sathanur HydroElectric Power Station. The purpose of the visit was to provide students with practical insights into the operation, maintenance, and functioning of a hydro-electric power plant. Objectives of the Visit: → Gain practical knowledge about the generation of electricity through hydropower. → Understand the components and working principles of a hydro-electric power station. → Learn about the environmental impact and sustainability aspects of hydro-electric power generation. → Explore career opportunities and potential roles in the field of hydro-electric power generation. → Explore the Research Possibilities and the technical problems associated with the hydroelectric power plants.



## EVENT-6

Department of Electrical and Electronics Engineering In Association with IIIC, IEEE and ISTE Chapter for II Year students organized An Industrial Visit to “Sathanur Hydro-Electric Power Station” on Date: 23.02.2024.

On 23 Feb 2024, a group of B.Tech. III Year/II Sem -EEE students from Madanapalle Institute of Technology, Madanapalle, Andhra Pradesh, embarked on an industrial visit to the Sathanur HydroElectric Power Station. The purpose of the visit was to provide students

with practical insights into the operation, maintenance, and functioning of a hydro-electric power plant.

Objectives of the Visit:

- Gain practical knowledge about the generation of electricity through hydropower.
- Understand the components and working principles of a hydro-electric power station.
- Learn about the environmental impact and sustainability aspects of hydro-electric power generation.
- Explore career opportunities and potential roles in the field of hydro-electric power generation.



## EVENT-7

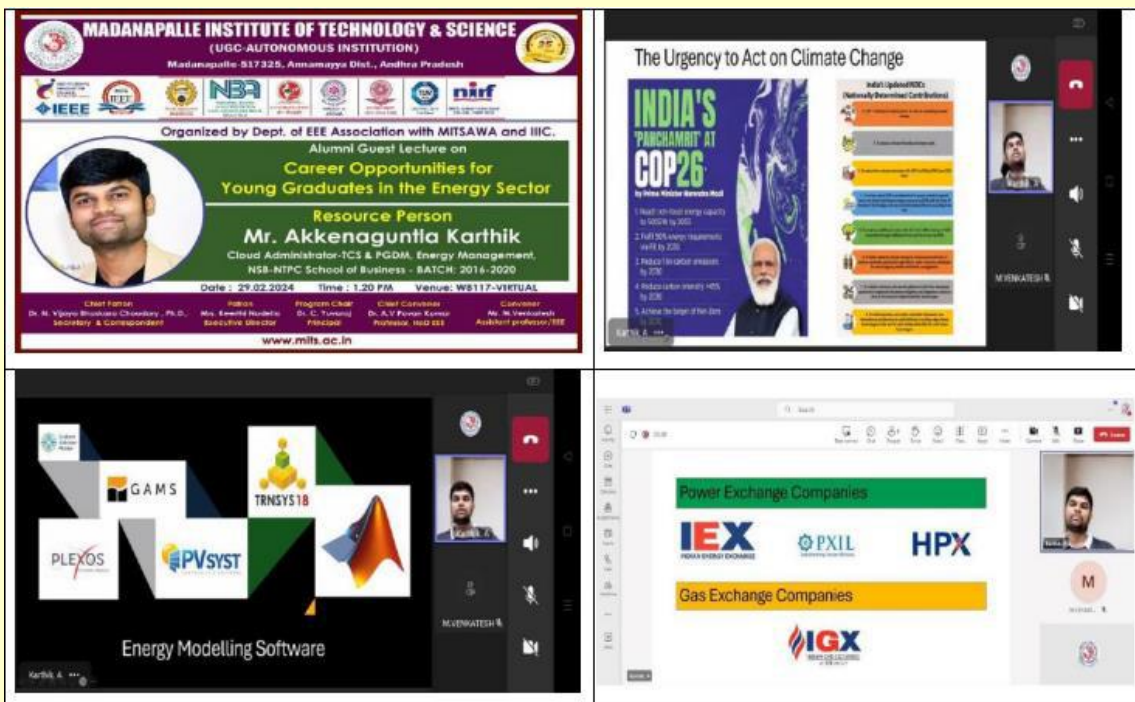
Department of Electrical and Electronics Engineering in association with IIIC and MITSAWA organised An Alumni Guest Lecture on “Career Opportunities for Young Graduates in the Energy Sector” on Date: 29.02.2024.

The program is started at 9:15 AM with a welcome address to all the Participants and the resource person Mr. Akkenaguntla Karthik, 2016-2020, Cloud Administrator-TCS & PGDM, Energy Management, NSB-NTPC School of Business by the Dr. A V Pavan Kumar, H.O.D, EEE, MITS, Madanapalle. The resource person started the session at 1.30



PM by extending his hearty thanks to the participants, organizing members, HoD, Principal and Management of MITS Madanapalle for giving opportunity to share his knowledge and experience on “Energy Sector”. The following topics were interacted with students to update their basic skill sets to meet the corporate requirement.

1. The evolving energy landscape: Discuss the current state of the energy sector, highlighting the shift towards renewable sources like solar, wind, and geothermal energy.
2. Emerging career paths: Explored a range of exciting career opportunities available in various segments of the energy sector, including research and development, project management, policy analysis, and business development.
3. Essential skills and knowledge: shared the crucial skills and knowledge needed to succeed in this dynamic field, covering technical expertise, problem-solving abilities, and communication skills.
4. Strategies for building a successful career: Provided Valuable insights and practical tips to help you navigate the job market, build a strong network, and launch a fulfilling career in the energy sector.



## EVENT-8

Department of Electrical & Electronics Engineering In Association with IIC and IEEE Chapter, MITS organised One Day Expert Talk on “Intellectual Property Rights: Concept, Importance, and Its Role in Economic Growth” on Date: 29.02.2024.

Dr. Indu Bharadwaj, Assistant Professor at Galgotias University, presents a comprehensive overview, elucidating the intricate relationship between IPRs and economic prosperity.

Intellectual Property Rights encompass legal rights granted to individuals or entities for their intellectual creations, including inventions, literary works, artistic expressions, and designs. These rights incentivize innovation by providing creators with exclusive rights over their creations for a specified period. In today's knowledge-based economy, IPRs serve as a cornerstone for fostering innovation, driving competitiveness, and stimulating economic growth.

Learning Concepts: The Following Topics were intensively addressed with case studies.

- Understanding Intellectual Property Rights (IPRs):
- Definition and scope of IPRs. ➤ Different types of IPRs
- Importance of IPRs in protecting intellectual creations.
- Significance of IPRs
- Incentivizing innovation and creativity.
- Protecting investments in research and development.
- Fostering economic growth and competitiveness.
- Legal Framework and Enforcement
- Role of IPRs in Economic Growth
- Case Studies and Examples

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Organized by Department of Electrical & Electronics Engineering  
One-Day Expert Talk On  
**"Intellectual Property Rights- Concept, Importance and its role in Economic Growth"**

**Resource Person**  
**Dr. Indu**  
Assistant Professor  
Department of Electrical Electronics and Communication Engineering  
Galgotias University, Greater Noida, U.P, India.

**Date : 29/02/24 Time : 10.00 AM -12.00 PM**

**Chief Patron**  
Dr. N. Vijaya Bhaskara Choudary - Ph.D.,  
Secretary & Correspondent

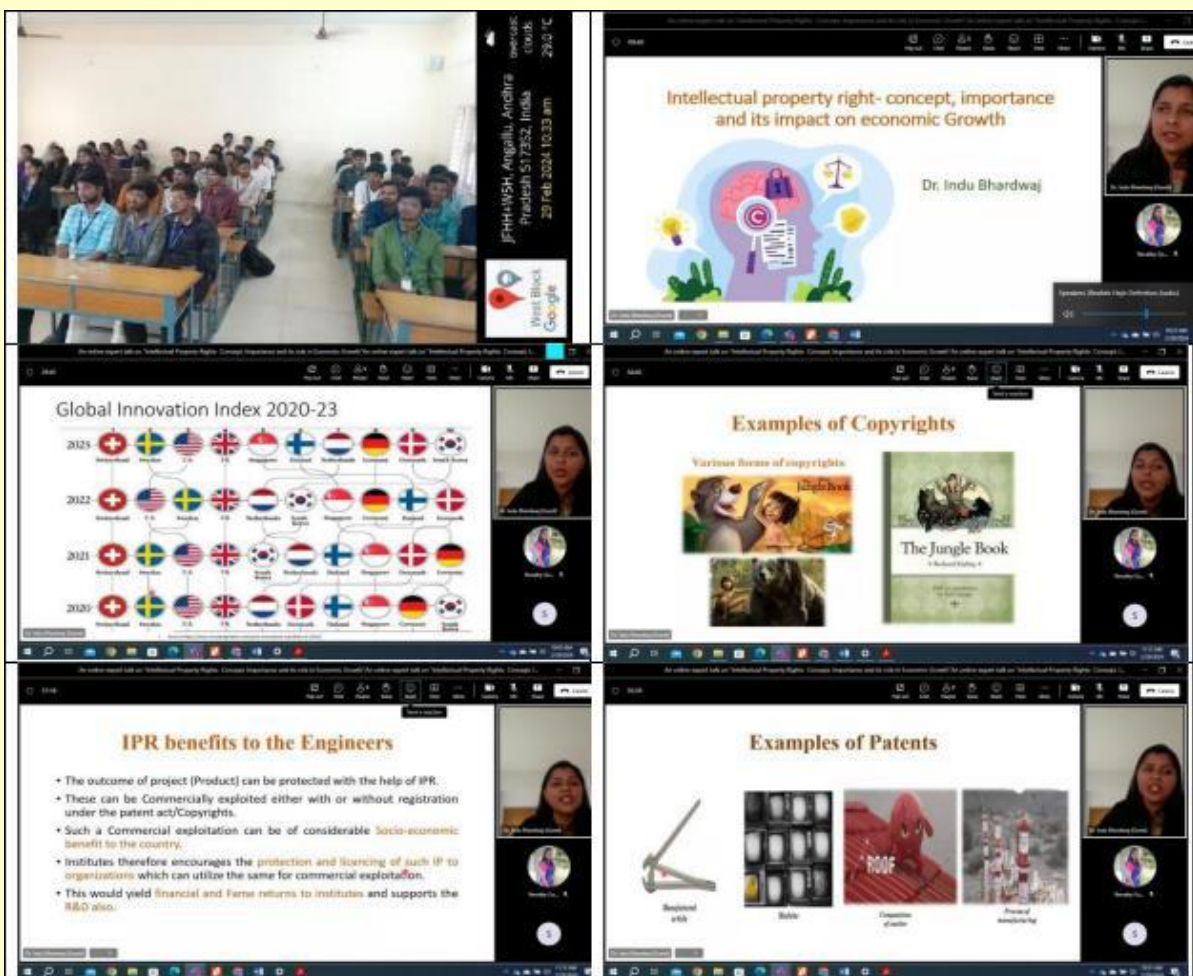
**Patron**  
Mrs. Keerthi Nadella  
Executive Director

**Program Chair**  
Dr. C. Yuvraj  
Principal

**Co-Chair**  
Dr. A V Pavan Kumar  
Professor, HoD EEE

**Coordinator**  
Mr. Saravanan, D  
(Assistant Professor, Department of EEE) &  
Mrs. K. Revathi  
(Assistant Professor, Department of EEE)

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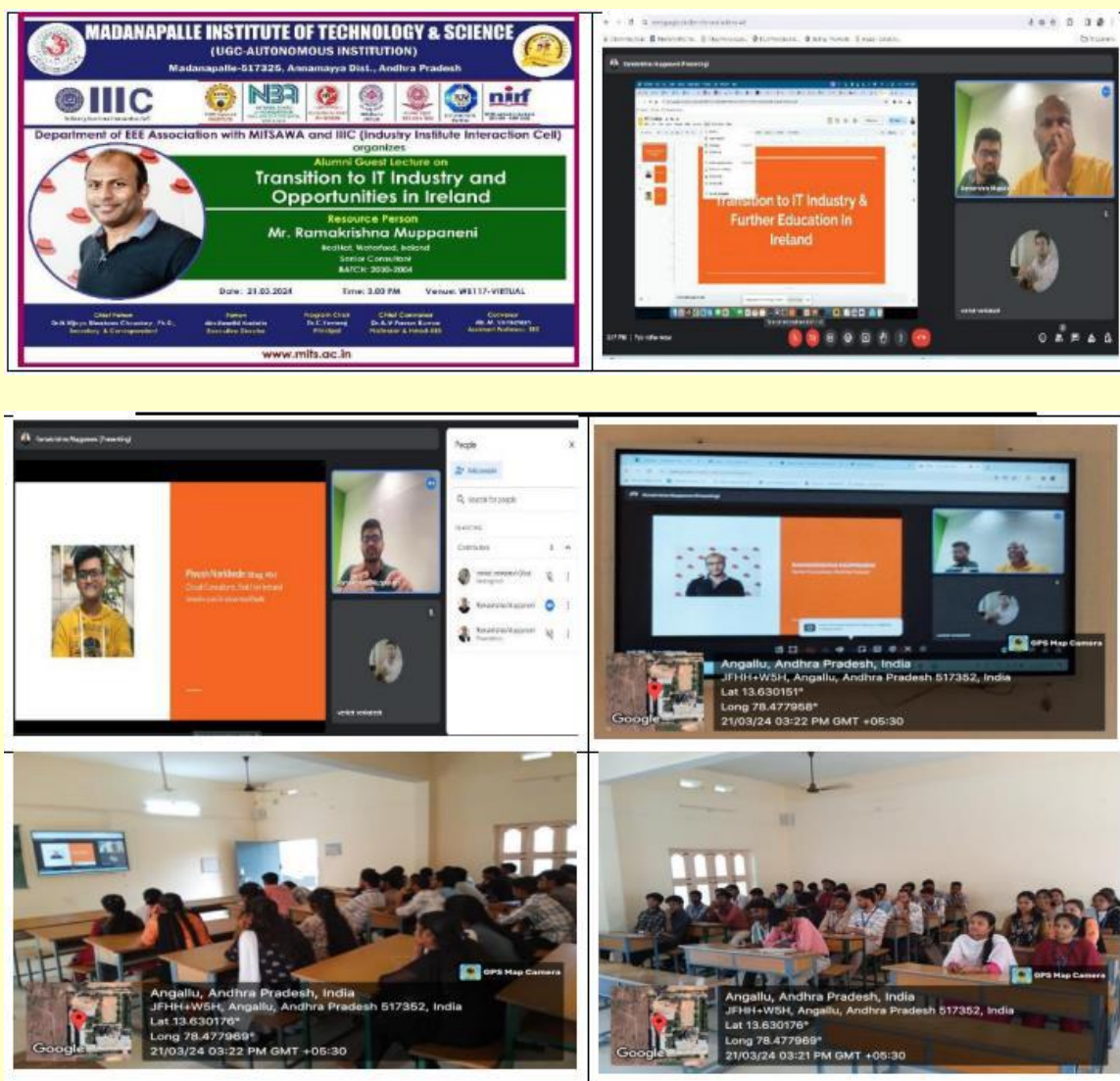


## EVENT-9

Department of Electrical & Electronics Engineering Organised An Alumni Guest Lecture on “Transition to IT Industry and Opportunities in Ireland” on Date: 21.03.2024

The program is started at 9:15 AM with a welcome address to all the Participants and the resource person Mr. Ramakrishna Muppaneni, Senior Consultant, RedHat, Waterford, Ireland, by the Dr. A V Pavan Kumar, H.O.D, EEE, MITS, Madanapalle. The brief introduction to resource person was given by Dr. A V Pavan Kumar, H.O.D, EEE, after that session is handover to Mr. Ramakrishna Muppaneni, Senior Consultant, RedHat, Waterford, Ireland, The resource person started the session by extending his hearty thanks to the participants, organising members, HoD, Principal and Management of MITS Madanapalle for giving opportunity to share his knowledge and experience on “Transition to IT Industry”. He added the experience, Struggle after the B.Tech and explained the importance of Java, C, C++ to enter in to the IT industry. Mr.Ramakrishna Muppaneni gave instruction to the student to acquire the knowledge related to IT .





## EVENT-10

Department of Electrical & Electronics Engineering organized A One Day National Level Technical Symposium "TERA 2K24" on Date:02.04.2024.

The Department of Electrical and Electronics Engineering at Madanapalle Institute of Technology & Science organized a one-day National Level Technical Symposium "TERA-2K24" on April 2nd, 2024. The inaugural ceremony of TERA – 2K24 set the stage for an intellectually stimulating and engaging symposium on electrical revolutions and advancements. The event, themed "Techno Fest on Electrical Revolutions and Advancements," was inaugurated by the Chief Guest Er. Salai Manalan, Sr. Deputy General Manager, Bharat Heavy Electricals Limited, Ranipet, Tamil Nadu., alongside Dr. C. Yuvaraj, Principal, MITS, Dr. A V Pavan Kumar Head of the Department EEE & Chief Convener, and Convener Dr. T S Balaji Damodhar. Dr. A V Pavan Kumar, Head of the

Department of EEE, welcomed the gathering with an opening address. Dr. C. Yuvaraj, Principal of MITS, delivered the inaugural address, followed by the chief guest's address. It was a true honor to have Er. Salai Manalan with us on April 2nd, 2024. His extraordinary speech not only motivated our students but also left a lasting impact on everyone present here. His journey and experiences have served as a beacon of inspiration for all of us, showing that with determination, hard work, and strategic career planning, we can achieve great heights in our professional lives. In his enlightening presentation on "Thermal Power Plant Operations and Accessories," drawing from his extensive experience at BHEL, his expertise provided valuable insights into the intricacies of power plant operations, setting the tone for the symposium's discussions on cutting-edge advancements in the field of electrical engineering. The vote of thanks for the inaugural ceremony was proposed by Dr. T S Balaji Damodhar, Assistant Professor, MITS. About Chief Guest: Er. Salai Manalan, a veteran of Bharat Heavy Electricals Limited (BHEL) since 1984, boasts a distinguished career spanning over three decades. His expertise in water systems engineering and thermal power plant operations has left an indelible mark, notably in the meticulous engineering of Air preheater components and the supply of Desalination Plants for drinking water. With a commitment to excellence evident in his leadership roles and technical presentations, he continues to drive innovation as Senior Deputy General Manager in Water Systems Engineering at BHEL, enriching both the industry and communities served. Inauguration by Lighting Lamps Welcome Ad.

Registered Participants: TERA – 2K24 featured a range of technical events aimed at fostering innovation and research excellence. The symposium attracted a 423 number of participants, both technical and non-technical, showcasing the widespread interest and enthusiasm for TERA – 2K24. Technical Events: 90 participants registered, including 44 teams for paper presentation, 30 teams for poster presentation, and 18 teams for the project expo, Technical Events were hosted in hybrid mode. Non-Technical Events: A total of 323 participants registered, with varying numbers of teams participating in each event.

**Inauguration by Lighting Lamps**



**Welcome Address**



**Inaugural Address**



**Chief Guest Address**



**Release of Souvenir**



**Felicitation**







## EVENT -11

Department of Electrical & Electronics Engineering Organised An Online Guest Lecture on “Protecting innovation through IPR” on Date: 09.05.2024.

The programme is started at 1:00 PM with a welcome address to all the audience by the Mr. Ramesh Kumar R, Assistant Professor, EEE, MITS, Madanapalle. The resource person was Mr. P. Mohanavel, Director, EVNEXUS Private Limited, Chennai & Founder of A R Green Mobility, Katpadi, Vellore, India. The resource person started the session by extending his hearty thanks to the participants, organizing members for giving him opportunity to share his knowledge and experience in “Protecting innovation through IPR”. The session covers the following topics:

- Intellectual Property Right
- Importance of IPR in promoting innovation.

- Trade Secrets
- Types of IPR
- Copyright • Trade Mark
- Geographical Indications
- Patent • Evolution of IPR laws in India
- Designs
- Recent Initiatives by India Intellectual Property Office
- Transparency and dissemination of information and quality monitoring
- Objective of IPR policy
- Startups IPR scheme
- Indian Patent Agent Examination
- Licensing and Technology Transfer



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Organized by Department of Electrical & Electronics Engineering

Online Guest Lecture on  
**"Protecting Innovations through IPR"**

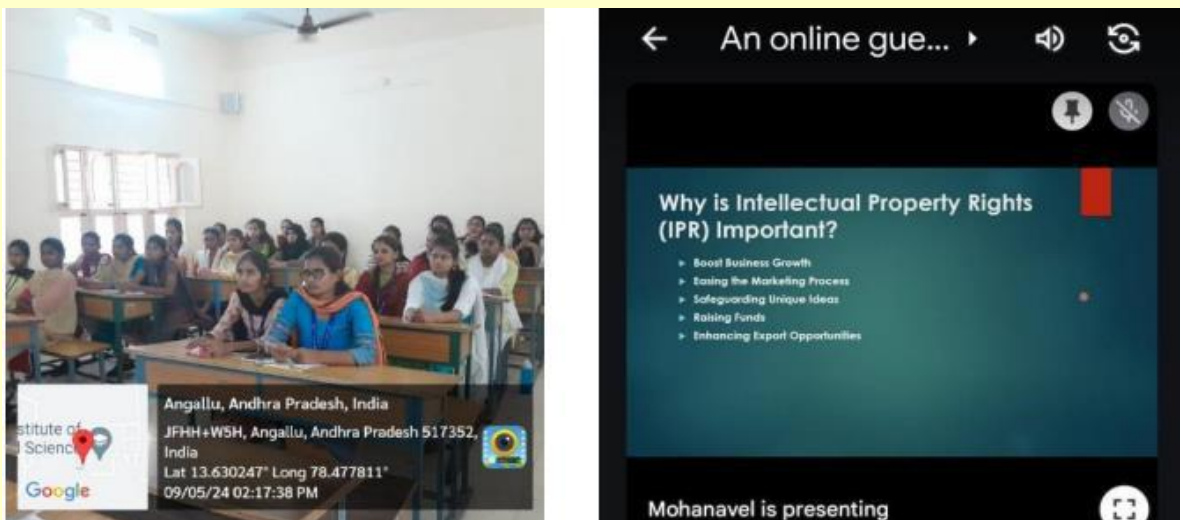
Resource Person  
**Mr. P. Mohanavel**  
Director  
EVNEXUS Private Limited, Chennai & Founder of  
A # Green Mobility, Katpadi, Vellore, India

Date : 09/05/2024 Time : 1.00 PM -3.00 PM

Chief Patron: Dr.N.Vijaya Bhaskara Choudhary, Ph.D., Secretary & Correspondent  
Patron: Mrs.Kaveri Madhavi, Executive Director  
Program Chair: Dr.C.Tiwari, Principal  
Co-Chair: Dr. A.V. Paras Kumar, Professor, HOD IEE  
Coordinators: Banarash Kumar & Assistant Professor, IEE; M.B.Ravathy Gopinath, Assistant Professor, IEE

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## EVENT-12

Department of Electrical & Electronics Engineering Organised A Two days Industrial Visit to Kaynes Technology, Mysuru, Karnataka on Date: 18.05.2024 to 19.05.2024.

Objectives of Visit: The primary objectives of the visit were to:

1. Discuss and finalize a Memorandum of Understanding (MOU) between MITS and Kaynes Technology, Mysuru, Karnataka.
2. Explore opportunities for student internships.
3. Discuss potential placement opportunities for students of the EEE department.

Day 1: 18th June 2024 Journey:

- Departure: o Mr. Saravanan D and Mr. Rajesh, along with 20 students from the EEE department, started their journey from MITS College, Madanapalle at 2:00 PM.

- Arrival: o The group reached the company guest house at Kaynes Technology, Mysore around 11:45 PM.

Day 2: 19 th June 2024 Meeting Details: 1. Interaction with the Manager: o Participants: Mr. Rajesh, Mr. Saravanan D and Mr. Sunil Manager of Kaynes Technology.

o Discussion Points:

- The Manager provided an overview of Kaynes Technology, emphasizing its expertise in electronics manufacturing and solutions.
- Mr. Rajesh and Mr. Saravanan D highlighted the strengths of the EEE department at MITS and the skills of their students.



### EVENT-13

Department of Electrical & Electronics Engineering In Association with ISTE chapter, IEEE Student Chapter, and MITS Organised An Online Expert Talk On “NEP 2020 Leading to an Outcome Based Curriculum” on Date: 01.08.2024.

Event Overview On August 1, 2024, the Department of Electrical & Electronics Engineering (EEE) at MITS, in collaboration with the ISTE Chapter, IEEE Student Chapter, and the Institute Innovation Council, hosted an expert talk on the topic "NEP 2020 Leading to an Outcome Based Curriculum". The session was held from 11:00 AM to 1:00 PM in Seminar Hall B. Opening Remarks: The event commenced with a welcome address by Dr. A. V Pavan Kumar Head of the Department EEE, who provided a brief overview of the National Education Policy (NEP) 2020 and its relevance to the curriculum in engineering education. Chief guest Introduction: A brief introduction of the chief guest with his academic credentials and achievements was made by Mr. Saravanan D, Asst. Professor, Dept. of EEE





# MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

(UGC-AUTONOMOUS INSTITUTION)














**Expert Talk**  
on  
**NEP 2020 Leading to an Outcome Based Curriculum**

Organized by  
**Department of Electrical & Electronics Engineering**

in association with  
**ISTE Chapter, IEEE Student Chapter and Institute Innovation Council**

Date : 01/08/2024      Time : 11:00 AM to 1:00 PM      Venue: Seminar Hall B



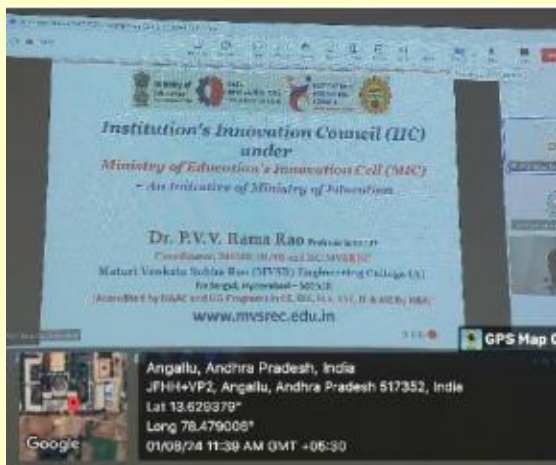
## Resource Person

# Dr.P.V.V. Rama Rao

Professor, Dept. of EEE

Maturi Venkata Subba Rao (MVSR) Engineering College ,Hyderabad

<b>Chief Patron</b> Dr.N.Vijaya Bhaskar Choudary Secretary & Correspondent	<b>Patron</b> Mrs.Koerthi Nadeella Executive Director	<b>Chief Coordinator</b> Dr.C.Yuvraj Principal	<b>Convener</b> Dr.AV Pavan Kumar HOD/ Dept. of EEE	<b>Coordinator</b> Mr.Saravanan D Assistant Professor/EEE	<b>Co-coordinator</b> Mr. Ramesh Kumar R Assistant Professor/EEE
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**Education Technology**

### Education Technology

*This Policy aims at appropriately integrating technology into all levels of education.*

- Technology in education to be used to
  - Improve teaching, learning and evaluation
  - Support teacher preparation and continuous teacher professional development
  - Enhance educational access to disadvantaged groups
  - Streamline education planning, administration and management
- New National Educational Technology Forum
  - Autonomous body - platform for free exchange of ideas the use of technology to improve learning, assess planning, administration
  - Facilitate decision-making induction, deployment, technology
- National Repository of Educational Data - will maintain all records related to institutions, teachers and students in digital form



**Teachers Education**

### Teacher Education



*This Policy aims to ensure rigorous teacher preparation in vibrant multidisciplinary institutions.*


- 4-year integrated Bachelor of Education at multidisciplinary institutions
  - Undergraduate programme of study including both disciplinary and teacher preparation courses
  - Stage-specific, subject-specific programme to prepare teachers from Foundational to Secondary stage
  - All subjects including arts, sports, vocational education, special education
  - Par with other undergraduate degrees - graduates eligible for Masters programme
- Current two-year programme to continue till 2030
  - After 2030, only institutions offering year teacher education programme can offer 2-year programmes
- No other kind of service teacher preparation programme will be offered after 2030
- Substandard and dysfunctional teacher education institutions to be closed down

## EVENT-14

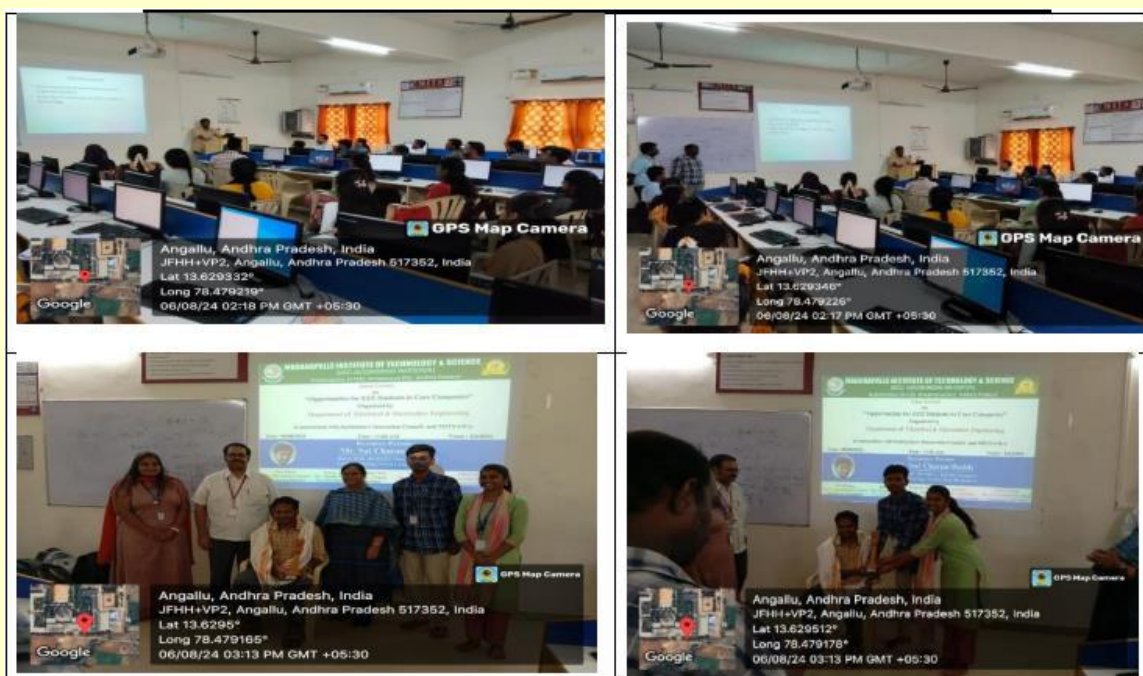
Department of Electrical & Electronics in association with IIIC and MITSAWA Organised An Alumni Guest Lecture on “Opportunities for EEE Students in Core companies” on Date: 06.08.2024.

The program is started at 9:15 AM with a welcome address to all the Participants and the resource person Mr. Sai Charan Reddy, Inverter Engineer, L&T Technology Service Ltd, Bengaluru, by the Dr. A V Pavan Kumar, H.O.D, EEE, MITS, Madanapalle. The brief introduction to resource person was given by Dr. A V Pavan Kumar, H.O.D, EEE, after that session is handover to Mr. Sai Charan Reddy, Inverter Engineer, L&T Technology Service Ltd, Bengaluru The resource person started the session by extending his hearty thanks to the participants, organising members, HoD, Principal and Management of MITS Madanapalle for giving opportunity to share his knowledge and experience on “Opportunities for EEE Students In Core companies”. The topics were covered by resource person are related to the Opportunities for EEE Students In Core companies based on PSpice, MATLAB and acquire knowledge to meet the corporate industries. The session started from the basic needs for getting job in core industries and it gone so far how to sustain in that, field.

 <b>MADANAPALLE INSTITUTE OF TECHNOLOGY &amp; SCIENCE</b> (UGC-AUTONOMOUS INSTITUTION) Madanapalle-517325, Annamayya Dist., Andhra Pradesh		
Guest Lecture on “Opportunities for EEE Students in Core Companies” Organized by Department of Electrical & Electronics Engineering in association with Institution's Innovation Council and MITSAWA		
Date : 06/08/2024	Time : 11:00 AM	Venue : KKB001
<b>Resource Person</b> <b>Mr. Sai Charan Reddy</b> Batch 2016 -20 (EEE), Inverter Engineer L&T Technology Service Ltd, Bengaluru		
Chief Patron Dr. N. Vijaya Bhaskar Choudhary Secretary & Correspondent	Patron Mrs. Keerthi Naidu Executive Director	Program Chair Dr. C. Yuvraj Principal
Convener Mr. M. Venkatesh Assistant professor/EEE		Chief Convener Dr. A.V. PAVAN KUMAR Professor & Head/EEE
www.mits.ac.in		







## EVENT-15

Department of Electrical & Electronics Engineering in association with IIIC and MITSAWA organized An Alumni Students Interaction on Date: 07.08.2024.

The program is started at 1.00PM with a welcome address to all the Participants and the resource person Mr. Ravvindranath Savali, Transformation Coach/Agile Master, Societe Generale, Bengaluru, by the Dr. A V Pavan Kumar, H.O.D, EEE, MITS, Madanapalle. The brief introduction to resource person was given by Dr. A V Pavan Kumar, H.O.D, EEE, after that session is handover to Mr. Ravvindranath Savali, Transformation Coach/Agile Master, Societe Generale, Bengaluru The resource person started the session by extending his hearty thanks to the participants, organizing members, HoD, Principal and Management of MITS Madanapalle for giving opportunity to share his knowledge and experience on “How to crack the first interview”. The topics were covered by resource person are related to the How to crack the first interview and acquire knowledge to meet the corporate industries. The session started from the basic needs for getting job and it gone so far how to sustain in that, field. Resource person was interacted with first-year students around 450 students were in the auditorium at 3.00 PM.

**MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE**  
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Madanapalle-517325, Annamayya Dist., Andhra Pradesh

**"ALUMNI-STUDENT INTERACTION "**  
Organized by  
Department of Electrical & Electronics Engineering  
in association with Institution's Innovation Council and MITSAWA

Date : 07/08/2024 Time : 1:00 PM Venue : KKB009

**Resource Person**  
**Mr. Ravindranath Savali**  
Batch 2006-10 (EEE) , Transformation Coach/Agile Master  
Societe Generale, Bengaluru

Chief Patron Dr. N. Vijaya Bhaskar Choudary Secretary & Correspondent	Patron Mrs. Keerthi Nallala Executive Director	Program Chair Dr. C. Vivasraj Principal	Convener Mr. M. Venkatesh Assistant Professor/E.E	Chief Convener Dr. A. V. PAVAN KUMAR Professor & Head/E.EE
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## EVENT-16

Department of Electrical & Electronics Engineering Organised A One Week Community Outreach Program for ATL Schools "Innovators of Tomorrow: A Hands-On STEM and Creativity Program for Young Minds" on Date: 26.08.2024 to 31.08.2024.

On 27.08.2024, By 10.30 am, 08 members of Electrical & Electronics Engineering department including students, faculty have reached the school campus of Jawahar Navodaya Vidyalaya, Valasapalle. First, we have interacted with School Principal Mr. Govind Rao and Mr. Jagadesh, PGT (Physics) in the principal room about the schedule and purpose of the visit. He also insisted that his students will definitely get motivated by such STEM activity.

Day 01 – Inaugural Session

Day 02 – Hands on Workshop – Basics of Arduino and program code

Day 03 - Hands on Workshop – Basics on Breadboard

Day 04 - Hands on Workshop – Breadboard connections

Day 05 - Hands on Workshop – Integrating Breadboard Components and Arduino

Day 06 - Hands on Workshop – Blinking of LED and Motor Control, Ultrasonic sensor, Solar PV panel & Closing remarks and feedback session.

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Madanapalle-517325, Annamayya District, Andhra Pradesh

**Department of Electrical & Electronics Engineering**  
In association with IIC, MITS  
Organizes

**Community Outreach Program for ATL Schools**  
**"Innovators of Tomorrow: A Hands-On STEM and Creativity Program for Young Minds"**

**Date:** 26.08.2024 to 31.08.2024

**Venue:** 1. JAWAHAR NAVODAYA VIDYALAYA, Valasapalle  
2. APSWR SCHOOL AND JR COLLEGE FOR GIRLS, BURAKAYALAKOTA  
3. APSWR SCHOOL FOR GIRLS( PM- Shri School) ,Valmikipuram

Chief Patron	Patron	Chief Convener	Coordinators
Dr. N. Vijaya Bhaskar Choudary Secretary & Correspondent	Mrs. Keerthi Nadella Executive Director	Dr. C. Yuvaraj Principal	Dr. A.V. Pavan Kumar Dr. K. Arul Kumar Mrs. Revathi Gopinath

[www.mits.ac.in](http://www.mits.ac.in)





## EVENT-17

Department of Electrical & Electronics Engineering Organised An Industry Visit to POWERICA Limited, Bangalore for the Inspection of 500 kVA Diesel Generator (D.G.) Set on Date: 19.09.2024.

The primary objective of this inspection was to evaluate the performance and condition of the 500 kVA Diesel Generator (D.G.) set at POWERICA LIMITED, Bangalore. The



inspection aimed to ensure compliance with technical specifications, safety standards, and overall reliability



PHOSOL rpt - Monitor

File Edit View Utilities Help

Site	Device	Parameter	Value	Units
AutoConnect	AutoConne...	Genset L1-L2 RMS Voltage	416	V
AutoConnect	AutoConne...	Genset L2-L3 RMS Voltage	414	V
AutoConnect	AutoConne...	Genset L3-L1 RMS Voltage	415	V
AutoConnect	AutoConne...	Genset L1 RMS Current	599.97	A
AutoConnect	AutoConne...	Genset L2 RMS Current	631.42	A
AutoConnect	AutoConne...	Genset L3 RMS Current	605.81	A
AutoConnect	AutoConne...	Genset Total kVA	440.4	kVA
AutoConnect	AutoConne...	Genset Total kW	439.4	kW
AutoConnect	AutoConne...	Genset Total Exported kWh	271.7	kWh
AutoConnect	AutoConne...	Average Genset Frequency	50.02	Hz
AutoConnect	AutoConne...	Average Engine Speed	1498	r/min (rpm)
AutoConnect	AutoConne...	Oil Pressure	268.2	kPa
AutoConnect	AutoConne...	Coolant Temperature	89	degC
AutoConnect	AutoConne...	Oil Temperature	107.125	degC
AutoConnect	AutoConne...	Battery Voltage	28.2	V
AutoConnect	AutoConne...	Genset Average Power Factor	1.00	
AutoConnect	AutoConne...	Genset Total kW Percent	110	%
AutoConnect	AutoConne...	Engine Running Time	1.70	h
AutoConnect	AutoConne...	Intake Manifold Temperature	52.0	degC
AutoConnect	AutoConne...	AT DEF Tank Level	50.0	%
AutoConnect	AutoConne...	Fuel Rate	98.90	L



## EVENT-18

Department of Electrical & Electronics Engineering in association with MITS IEEE Student Chapter Organised A Guest Lecture on “Solar PV Integration: Hardware Design and Development” on Date: 20.09.2024.



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A Report on  
**Guest Lecture on "Solar PV Integration: Hardware Design and Development"**  
Organized by  
Department of EEE and MITS IEEE Student Chapter  
20.09.2024



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Madanapalle - 517325, Annamayya Dist., Andhra Pradesh, India




**Guest Lecture**  
on  
**"Solar PV Integration: Hardware Design and Development"**  
Organized by  
Department of Electrical & Electronics Engineering (EEE)  
in association with MITS IEEE Student Chapter




Date : 20/09/2024      Time : 4:00 PM      Venue : Seminar Hall



**Resource Person**  
**Dr. Ajay Kumar**  
Assistant Professor  
PEC Chandigarh.

Chief Patron: Dr. N. Vijaya Bhaskar Choudhary, Secretary & Coordinator  
Patron: Mrs. Sankalpa Sankar, Executive Member  
Co-Patron: Dr. C. Yashwanth, President  
Chief Convener: Dr. A. V. Pavan Kumar, Professor & Head, EEE  
Convener: Dr. A. A. Prasad, Assistant Professor, EEE & ISTE coordinator, MITS  
Resource Person/Speaker: Dr. Ajay Kumar, Assistant Professor, Electrical Engineering Department, PEC Chandigarh.

Attendees: 56 students & 5 faculty members  
Venue: Seminar Hall      Time: 4:00 PM

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Background On 20th September 2024, the Electrical and Electronics Engineering Department of MITS Madanapalle, in association with the IEEE Student Branch, successfully organized a guest lecture on "Solar PV Integration: Hardware Design and Development." The session was attended by many undergraduate students and faculty from the Electrical and Electronics Engineering (EEE) department. The aim of the lecture was to provide students and faculty with a deeper understanding of solar photovoltaic (PV) integration, focusing on the hardware design and development challenges involved. The speaker for the event was Dr. Ajay Kumar, an accomplished Assistant Professor from PEC Chandigarh, with expertise in power electronics, renewable energy integration, and the control of microgrids. Dr. Ajay Kumar has made significant contributions to IEEE journals and conferences, and his research focuses on renewable energy integration, power converter design, and grid stability.

**Solar PV Integration: Hardware Design and Development**

Dr. Ajay Kumar  
Assistant Professor  
Department of Electrical Engineering  
Pondicherry Engineering College (Deemed to be University),  
Chennai, India  
Email: ajaykumar@pec.edu.in

Dr. Ajay Kumar

**Solar Energy Conversion: Direct Conversion to Electricity**

- ✓ The Photovoltaic Effect-Direct Conversion to Electricity: Direct generation of electrical power is one of the most important types of solar energy conversion systems.
- ✓ Photovoltaic Effect is the way in which incoming solar light excites electrons, light-particle induced electron-hole pairs, directly generates electricity.

Dr. Ajay Kumar

Angali, Andhra Pradesh, India  
JFH+WSH, Angali, Andhra Pradesh 517352, India  
Lat 13.630142°  
Long 78.476053°  
20/09/24 04:29 PM GMT +05:30

Google

GPS Map Camera



## EVENT-19

Department of Electrical & Electronics Engineering In Association With IEEE Student Chapter Organised IEEE CASS Seasonal School titled “Neuromorphic Computing And Logic In Memory Computing Using Non-Volatile Memory Devices” on Date: 23.09.2024 To 25.09.2024.



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### A Report on

## IEEE CASS SEASONAL SCHOOL TITLED “NEUROMORPHIC COMPUTING AND LOGIC IN MEMORY COMPUTING USING NON-VOLATILE MEMORY DEVICES”

Organized by

Department of Electrical & Electronics Engineering (EEE) in association with IEEE Student Chapter, MITS Madanapalle

23/09/2024 to

25/09/2024

<h4 style="text-align: center; margin: 0;">About the Institute</h4> <p style="font-size: 0.8em; margin: 0;">Madanapalle Institute of Technology &amp; Science (MITS) is an Autonomous Institution established in 1988. It is the first of its kind in the region. It is a multi-campus institution with a total area of 25.17 km<sup>2</sup> spread over 100 acres. It is located in Madanapalle, 20 km from the city of Ananthapuramu. It is a multi-campus institution with a total area of 25.17 km<sup>2</sup> spread over 100 acres. It is located in Madanapalle, 20 km from the city of Ananthapuramu. It is a multi-campus institution with a total area of 25.17 km<sup>2</sup> spread over 100 acres. It is located in Madanapalle, 20 km from the city of Ananthapuramu.</p> <h4 style="text-align: center; margin: 0;">About the Seasonal School</h4> <p style="font-size: 0.8em; margin: 0;">The Seasonal School is a short-term program designed to provide students with a comprehensive understanding of the latest trends and developments in the field of Neuromorphic Computing and Logic in Memory Computing. The program is organized by the Department of Electrical &amp; Electronics Engineering (EEE) in association with the IEEE Student Chapter, MITS Madanapalle.</p> <h4 style="text-align: center; margin: 0;">Description of the seasonal school</h4> <p style="font-size: 0.8em; margin: 0;">The seasonal school is a short-term program designed to provide students with a comprehensive understanding of the latest trends and developments in the field of Neuromorphic Computing and Logic in Memory Computing. The program is organized by the Department of Electrical &amp; Electronics Engineering (EEE) in association with the IEEE Student Chapter, MITS Madanapalle.</p> <h4 style="text-align: center; margin: 0;">Contact Details</h4> <p style="font-size: 0.8em; margin: 0;">Dr. Naveen Kondasamy Professor Electronics and Communication Engineering Madanapalle Institute of Technology and Science IEEE Senior Member Research Fellow, National University of Singapore (2019-2023) Email : drnaveen@mits.ac.in Contact : 991 940029189</p>	<h4 style="text-align: center; margin: 0;">Organizing Committee</h4> <p style="font-size: 0.8em; margin: 0;">Chair Person Dr. N. Vijayarajasekhar Choudhary Secretary &amp; Correspondent</p> <p style="font-size: 0.8em; margin: 0;">Patron Mrs. Kaveri Nandini Executive Director</p> <p style="font-size: 0.8em; margin: 0;">Programme Chair Dr. C. Naveen Principal</p> <p style="font-size: 0.8em; margin: 0;">Convener Dr. Naveen Kondasamy Professor</p> <h4 style="text-align: center; margin: 0;">Advisory &amp; Organizing Committee Members</h4> <p style="font-size: 0.8em; margin: 0;">Dr. C. Ramani Sathya, VP-Administration Dr. P. Ramaswathi, VP-Academics Dr. R. Thulasiram Naidu, R&amp;D Advisor Dr. P. Sivakrishna, R&amp;D Associate Dean Dr. A.V. Pavan Kumar, EEE HOD Dr. C. Kumar, IEEE Coordinator</p> <h4 style="text-align: center; margin: 0;">Registration Details</h4> <p style="font-size: 0.8em; margin: 0;">Registration Fees (for Students, Researchers, and Faculty Members), including the Discount for CAS Society Members: Rs.400 for IEEE CAS Members Rs.600 for IEEE Members Rs.800 for Non-IEEE Members Last Date for Registration : 20/09/2024</p> <h4 style="text-align: center; margin: 0;">Registration and payment Link</h4> <p style="font-size: 0.8em; margin: 0;"><a href="https://forms.gle/7Dk51EbuYFxd9Fos">https://forms.gle/7Dk51EbuYFxd9Fos</a></p> <p style="font-size: 0.8em; margin: 0;">Seasonal School Website: <a href="http://www.mits.ac.in/sscas">www.mits.ac.in/sscas</a></p>	<div style="text-align: center;">  <h3 style="margin: 0;">MADANAPALLE INSTITUTE OF TECHNOLOGY &amp; SCIENCE</h3> <p style="margin: 0;">(UGC-AUTONOMOUS INSTITUTION)</p> <p style="margin: 0;">Madanapalle-517325, Ananthapuram Dist., Andhra Pradesh</p> </div> <h4 style="text-align: center; margin: 0;">IEEE CAS SEASONAL SCHOOL ON “NEUROMORPHIC COMPUTING AND LOGIC IN MEMORY COMPUTING USING NON-VOLATILE MEMORY DEVICES”</h4> <p style="text-align: center; font-size: 0.8em; margin: 0;">SPONSORED BY IEEE CIRCUITS AND SYSTEMS SOCIETY SUPPORTED BY IEEE HYDERABAD SECTION</p> <div style="text-align: center;">   </div> <div style="text-align: center;">  <p style="margin: 0;">SEASONAL SCHOOL 2024 23-25 SEPTEMBER 2024 <a href="http://www.mits.ac.in">www.mits.ac.in</a></p> </div>
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Time Schedule in Indian Standard Time:

1. Dr FONG, Xuanyao Kelvin, Assistant Professor, Electrical and Computer Engineering, National University of Singapore, Singapore. Date: 23/9/2024, Meeting Time: 11 AM – 12.30 AM IST



2. Dr Kim Tae Hyoung, Associate Professor, School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore. Date: 23/9/2024, Meeting Time : 2 PM – 3.30 PM IST

3. Dr Damien QUERLIOZ Research Director, CNRS Adjunct Professor, Université Paris-Saclay Centre de Nanosciences et de Nanotechnologies 10 Boulevard Thomas Gobert, 91120 Palaiseau, France Date: 23/9/2024, Meeting Time: 4 PM – 5 PM IST

4. Dr. Shubham Sahay Assistant Professor, Department of Electrical Engineering Indian Institute of technology Kanpur India Date: 24/9/2024, Meeting Time: 10 AM – 11.30 AM IST


5. Dr. Merlyne De Souza, Professor, Department of Electronic and Electrical Engineering, University of Sheffield, United Kingdom Date : 24/9/2024 , Meeting Time : 2 PM – 3 PM IST

6. Dr. Thomas Kämpfe, Group Manager Integrated RF & AI, Fraunhofer IPMS (Center Nanoelectronic Technologies CNT) An der Bartlake 5, 01109 Dresden, Germany Date : 24/9/2024, Meeting Time: 3.30 PM – 4.30 PM

## **EVENT -20**

Department of Electrical & Electronics Engineering in association with Institute Innovation Council (IIC) An Online Guest Lecture “Smart Grid and Renewable Energy with AI Tools” on Date: 16.10.2024.


On October 16, Wednesday 2024, the Department of Electrical & Electronics Engineering (EEE) in collaboration with the Institute Innovation Council (IIC) hosted an online guest lecture titled "Smart Grid and Renewable Energy with AI Tools". The guest lecture was delivered by the esteemed Dr. K. Ravi, Professor, Department of EEE, Vellore Institute of Technology, Vellore, Tamilnadu. Dr. K. Ravi, a renowned expert in smart grid and renewable energy in engineering sector enlightened the audience with his deep insights into the energy sector and smart grid design integration and its role in fostering research and innovative methods of use. The session was started at 2 PM. The Guest Lecture was initiated by Dr. A. V. Pavan Kumar, HOD of EEE Department. The resource person Dr. K. Ravi was introduced by Dr. K. Lakshmikhandan, Assistant Professor in the Department of EEE. The resource expert addressed the significant careers in renewable energy and the various power grids.




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Madanapalle - 517325, Annamayya Dist., Andhra Pradesh, India





**INSTITUTION'S  
INNOVATION  
COUNCIL**  
(Ministry of Education Initiative)

## Guest Lecture


on

## "Smart Grid and renewable energy with AI Tools "

Organized by

**Department of Electrical & Electronics Engineering (EEE)**

in association with **INSTITUTION'S INNOVATION COUNCIL**



**Date : 16.10.2024 - Wednesday**

**Time : 2:00 to 4:00 PM**

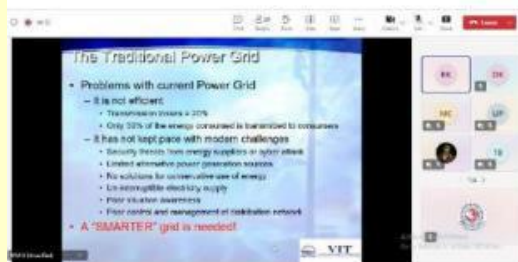
**Venue : Seminar Hall - B**

**Resource Person**

**Dr. K. Ravi, B.E., M.E., Ph.D.,**

Professor, Department of Electrical Engineering,  
School of Electrical Engineering (SELECT), VIT University, Vellore -632014, Tamil Nadu.

<p><b>Chief Patron</b> Dr. N. Vijaya Bhaskar Choudhary Secretary &amp; Correspondent</p>	<p><b>Patron</b> Mrs. Keerthi Nadella Executive Director</p>	<p><b>Co - Patron</b> Dr. C. Yuvraj Principal</p>	<p><b>Chief Convener</b> Dr. A.V PAVAN KUMAR Professor &amp; Head /EEE</p>	<p><b>Coordinator</b> Dr. K. LakshmiKandan Assistant Professor/EEE</p>
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## EVENT -21

Department of Electrical & Electronics Organized A Parent - Teacher Meeting on Date: 25.10.2024.

Dr. Gourav Kumar Suman delivered the welcome address, followed by Dr. Nehru Kandasamy, who explained the department's vision and mission to the parents.

Subsequently, Mr.M.Venkatesh , provided an overview of the Program Outcomes (POs) and Program Specific Outcomes (PSOs).

The following points have been conveyed to parents in the meeting.

- Student's current attendance details and mandatory attendance requirements.
- Academic performance, including current semester results and any backlogs to date.
- Importance of discipline and adherence to campus dress code.
- Job opportunities in core and software sectors for students in both government and private sectors through exams like GATE/IES and other higher education avenues.
- Technical training provided to students to enhance their chances in campus placements.
- Remedial classes conducted to support academically weak students.
- Extracurricular and co-curricular activities aimed at fostering overall development and encouraging an entrepreneurial mind-set among students.



## EVENT -23

Department of Electrical & Electronics Organized A One day Industrial Visit to Powerica Limited, Bangalore on Date: 15.11.2024.

Powerica Limited was established in the year 1984 under the dynamic leadership of visionary Mr. Naresh Oberoi. It is also promoted by Bharat Naresh Oberoi and Kharatiram Kharak Puri, who have been involved in the diesel generator set business for several

decades. Powerica has evolved to become a leading end-to-end power solution provider in conventional diesel-based, standby and prime power applications. Dynamic growth across verticals has also led Powerica to have a strong footprint in renewable energy projects. Powerica is the Original Equipment Manufacturer (OEM) in India for Cummins India Limited, the global leaders in the design, manufacture, distribution and servicing of diesel engines. The company is engaged in manufacturing diesel generating sets, components and erection, supply-installation testing & commissioning (SITC), operation maintenance, and other services relating to diesel generating sets. These services are provided for diesel generating sets with capacities from 7.5kVA to 2750kVA prime. In addition, they design and manufacture HHP (750kVA to 2000kVA) sound attenuated containerized DG sets that are portable and simple to install & ready to use (RTU) plug-and-play.



## EVENT -22

Department of Electrical & Electronics Organized A One Day Industrial Visit to FANUC India Private Limited, Bangalore on Date: 27.11.2024.

FANUC started the development of NCs (numerical controls) in 1955, and ever since, has devoted itself to focusing on factory automation. FANUC is active in the fields of FA, which encompasses basic technologies, consisting of NCs, servos and lasers, and Robots to which such basic technologies are applied, as well as Robo machines. Through the diligent efforts of FANUC to apply IoT/AI technologies to all fields, consisting of FA, Robots and Robo machines, customers are able to use FANUC products more efficiently. FANUC also offers service, with a policy for not terminating support of FANUC products as long as they are used by customers. Through such activities, FANUC contributes to the development of manufacturing industries in Japan and overseas, by promoting automation and efficiency in customers' factories.





### Faculty Publications -Jan 2024 -Dec 2024

#### SCI

S.No	Author	Co-authors	Title of the Paper/book/book chapter	DOI/URL	Publisher
1	T.S. Balaji Damodhar	P. Anandan, C. Nalini, M. Asha Jerlin, Akila Victor, K. Anusha, R. Jothilakshmi	A mutual certificate-based data privacy scheme for ubiquitous and sustainable computing system users	<a href="https://doi.org/10.1016/j.seta.2023.103356">https://doi.org/10.1016/j.seta.2023.103356</a>	SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS
1	C. H. Srinivas	I. Kranthikumar, C. H. Srinivas, T. Vamsee Kiran, P. Pradeep, V. Balamurugan	A novel hybrid approach for efficient energy management in battery	<a href="https://doi.org/10.1007/s00202-024-02483-9">https://doi.org/10.1007/s00202-024-02483-9</a>	Electrical Engineering
3	Dr. Vineet Kumar	<b>Ark Dev</b> Vineet Kumar Diwaker Pathak Ayyarao S. L. V. Tummala Sachin Sharma Vasudevan Kuppan	Improved Extraction of Parameters of Solar PV Cell Diode Model using Marine Walrus Inspired Optimization Algorithm	<a href="https://ieeexplore.ieee.org/document/10763518/authors#authors">https://ieeexplore.ieee.org/document/10763518/authors#authors</a>	IEEE Access
4	Dr. T. S. Balaji Damodhar	Pushparajan, Ramesh; Devaraj, Tamilarasi; Balaji Damodhar, Timiri Sonachalam; Kannan, Chandrasekaran	Fractional Jaya election-based optimization enabled routing and charge scheduling for electric vehicle in cloud-assisted	10.1002/dac.5894	International Journal of Communication Systems

			Vehicular Ad Hoc NETwork		
5	Dr. Vineet Kumar	Ark Dev, Kunalkumar Bhatt, Bappa Mondal, Mohit Bajaj Milkias Berhanu Tuka	Enhancing load frequency control and automatic voltage regulation in Interconnected power systems using the Walrus optimization algorithm	<a href="https://www.nature.com/articles/s41598-024-77113-2">https://www.nature.com/articles/s41598-024-77113-2</a>	Scientific Reports

### **Scopus Journal Publication List**

S. No	Author	Co-authors	Title of the Paper/book/book chapter	DOI/URL	Publisher
1	Dr. V. B. Thurai Raaj	R. Jayaprakash, Dr. V. B. Thurai Raaj, A V Pavan Kumar	Supplementary for waste Heat Recovery in Electrical power generation	<a href="https://ijritcc.org/index.php/ijritcc/article/view/10181">https://ijritcc.org/index.php/ijritcc/article/view/10181</a>	International Journal on Recent and Innovation Trends in Computing and Communication
2	Arapirala Venkata Pavan Kumar	Balamurali Krishna Ponukumati, Anil Kumar Behera, Lipsa Subhadarshini, Manoj Kumar Maharana, Arapirala Venkata Pavan Kumar	Unbalanced Distribution Network Cross-Country Fault Diagnosis Method with Emphasis on High-Impedance Fault Syndrome	<a href="https://doi.org/10.48084/etasr.6917">https://doi.org/10.48084/etasr.6917</a>	Engineering, Technology and Applied Science Research (ETASR)
3	K. Lakshmi Khandan	K. Lakshmi Khandan, T. Murali Krishna, S. Swetha, V. Renuka, G. Padmapriya, Harshal Patil, Nellore Manoj Kumar	Green horizons sustainable practices in Data centre networking for environmental Conservation	<a href="https://scibulcom.net/en/article/lbaYrBL3mm7SJNEhOqvT">https://scibulcom.net/en/article/lbaYrBL3mm7SJNEhOqvT</a>	Journal of Environmental Protection and Ecology
4	Chodagam Srinivas	N Madhusudhan Reddy*, Dr. T. Vamsee Kiran, I Kranthi Kumar, Karri Ravikumar Reddy, Chodagam Srinivas and K Divya	Optimizing Capacitor Placement in Distribution Systems Under Variable Loading Conditions with Golden Jack Optimization (GJO)	<a href="https://ijeer.forajournal.co.in/archive/volume-12/ijeer-120202.html">https://ijeer.forajournal.co.in/archive/volume-12/ijeer-120202.html</a>	International Journal of Electrical and Electronics Research (IJEER)
5	Mr.B.Karthick	Vengatesan VAmala Arockia Raj Kumara Swamy I Venkateswaran	A NEW SOLUTION FOR TACKLING MISMATCHING LOSSES IN SOLAR PV ARRAY VIA IMAGE ENCRYPTION	<a href="http://www.arpnjournal.org/journals/research_papers/rp_2">http://www.arpnjournal.org/journals/research_papers/rp_2</a>	ARPN Journal of Engineering and Applied Sciences

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### **Scopus Conference**

<b>S.No</b>	<b>Author</b>	<b>Title of the Paper/book/book chapter</b>	<b>Index</b>
1	Dr. T. S. Balaji Damodhar	Data-Driven with IoT Sensing and Deep Learning Model for Dynamic Skin Cancer Diagnosis	Scopus Scopus
2	Mr M Venkatesh	Fault Detection in Building Infrastructure Using IoT Sensors and Bayesian Network	
3	Mr Rajesh K S	Cloud-based Decision Support Systems for Securing Farm-to-Table Traceability using IoT and KNN Algorithm	Scopus
4	Dr. A. V. Pavan Kumar	Efficiency Analysis of VSC Controllers: Discrete PWM vs Improved Hysteresis PWM for Voltage Sag Improvement in Grid-Connected Hybrid PV-Wind Systems	Scopus
5	Dr. A. V. Pavan Kumar	Reactive Power Compensation in Multi-microgrid Environment	Scopus
6	Dr. A. V. Pavan Kumar	Three-Phase Power Distribution from Electric Vehicles: Enabling Rural Electrification and Sustainable Mobility	Scopus
7	Mr. Ramesh Kumar R	Design and Analysis of BLDC Motor-Based Electric Vehicle Using Fuzzy Logic Control	Scopus
8	Dr. A. V. Pavan Kumar	A DVR-Based Compensation System Under Various Power System Faults in a Multi-microgrid	Scopus

