



MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE
(UGC-AUTONOMOUS)

Affiliated to JNTUA, Anantapuramu & Approved by AICTE, New Delhi
Recognised Research Center, Accredited by NBA for CE, CSE, ECE, EEE, ME, MBA
& MCA, Recognised by UGC under the sections 2(f) and 12(B) of the UGC act 1956



Report on
Industry Insight
on
“Energy Conservation – Watt You Save Matters!”

Organised by
Department of Electrical and Electronics Engineering
In Association with IEI Students’ Chapter and IIIC
Date: 03.02.2026

Coordinators: Dr. A V Pavan Kumar, Professor & Head/EEE and Mr. Ramesh Kumar R, AP/EEE

Submitted by: Mr. Ramesh Kumar R, Assistant Professor, Dept. of EEE

Resource Person: Mr. S V Mahesh Babu, Executive Engineer (O & M), 400 kV Substation, Kalikiri

Mode of Conduct: Offline

Total number of participants: 120 (B. Tech - II Year and III Year EEE Students)

MITS
MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE
(Deemed to be University under section 3 of UGC Act, 1956)
Madanapalle-517325, Andhra Pradesh, India.

Industry Insight
on
“Energy Conservation - Watt You Save Matters!”
Organized by
Department of Electrical and Electronics Engineering
in association with IEI Students’ Chapter and IIIC.

Resource Person
Mr. S V. Mahesh Babu
Executive Engineer,
O & M/ 400 kV Substation,
Kalikiri

Date: 03.02.2026
Time: 1.30 PM to 4.30 PM
Venue : Seminar Hall - A

Chief Patron Dr. N. Vijaya Bhaskar Choudary Founder & Chancellor	Patrons Shri. N. Dwarakanath Pro Chancellor Mrs. Keerthi Nadella Executive Director	Program Chair Dr. C. Yuvaraj Vice Chancellor (i/c)	Co-Chairs Dr. D. Pradeep Kumar Registrar (i/c) Dr. P. Ramanathan Principal
Convenors Dr. Dipankar Roy Dean-School of Engineering Dr. C. Kamal Basha Vice Principal-Administration	Coordinators Dr. A.V. Pavan Kumar Professor & Head/EEE Mr. Ramesh Kumar R Asst. Professor - EEE		

www.mits.ac.in Follow us on:



MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE (UGC-AUTONOMOUS)



Affiliated to JNTUA, Anantapuramu & Approved by AICTE, New Delhi
Recognised Research Center, Accredited by NBA for CE, CSE, ECE, EEE, ME, MBA
& MCA, Recognised by UGC under the sections 2(f) and 12(B) of the UGC act 1956

Introduction:

The guest lecture program commenced with a warm welcome address delivered by Mr. Ramesh Kumar R. This was followed by the Chief Guest introduction presented by the III Year student Ms. Sufiya Danish. Following this, Dr. A. V. Pavan Kumar, HoD, Department of EEE, highlighted how such expert sessions play a vital role in enhancing students' technical knowledge and supporting their career development. Finally, the Chief Guest shared a few words on the significance of conducting guest lectures and encouraged students to make effective use of such learning opportunities.

Objectives of the Guest Lecture:

- To create awareness among students about the importance of energy conservation in day-to-day life.
- To educate students on the environmental impact of fossil fuels and the need for sustainable energy usage.
- To introduce students to renewable energy sources and their role in reducing dependency on conventional fuels.
- To familiarize students with BEE, Energy Conservation Act, and Star Rating system for energy-efficient appliances.
- To provide practical guidelines for saving electricity in domestic, commercial, and agricultural sectors.

Content Delivered during the Session:

The guest lecture was delivered on the topic "Energy Conservation – Watt You Save Matters!" emphasizing that electricity has become an essential part of modern life and must be used carefully as it is generated through costly and resource-intensive processes.

The session explained the major sources of electrical energy and classified them into conventional (non-renewable) sources such as coal, oil, natural gas, hydro, and nuclear fuels, and renewable (non-conventional) sources such as solar, wind, tidal, geothermal, and biomass energy. The resource person highlighted that fossil fuels are limited and depleting rapidly, and their continuous usage releases harmful greenhouse gases like CO₂, SO₂, and NO₂, leading to global warming, pollution, climate imbalance, and health hazards. The risks associated with nuclear waste disposal were also discussed.

The lecture stressed the need to promote renewable energy sources, particularly solar and wind, as they are eco-friendly and reduce dependence on fossil fuels. The speaker compared the high cost of power generation, transmission, and distribution with the relatively lower cost of conserving energy, stating that energy conservation improves national energy security and supports environmental sustainability.

The role of the Bureau of Energy Efficiency (BEE) and the Energy Conservation Act 2001 was introduced, along with the concept of BEE Star Rating, encouraging the use of energy-efficient appliances. Practical methods to reduce energy consumption were explained for domestic appliances, lighting systems, air conditioners, and general usage habits, including switching off devices when not required and avoiding standby power loss. The session also



MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE (UGC-AUTONOMOUS)



Affiliated to JNTUA, Anantapuramu & Approved by AICTE, New Delhi
Recognised Research Center, Accredited by NBA for CE, CSE, ECE, EEE, ME, MBA
& MCA, Recognised by UGC under the sections 2(f) and 12(B) of the UGC act 1956

covered energy saving in agriculture by recommending proper pump selection and the use of capacitors for improving power factor and preventing motor and transformer damage.

Overall, the lecture concluded with a strong message that conserving electricity is both economical and a social responsibility for protecting the environment and future generations.

Photographs:





MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE (UGC-AUTONOMOUS)



Affiliated to JNTUA, Anantapuramu & Approved by AICTE, New Delhi
Recognised Research Center, Accredited by NBA for CE, CSE, ECE, EEE, ME, MBA
& MCA, Recognised by UGC under the sections 2(f) and 12(B) of the UGC act 1956

Outcomes:

1. Students understood the importance of energy conservation for environmental protection and sustainable development.
2. Students learned the difference between conventional (non-renewable) and renewable energy sources and their impacts.
3. Students became aware of how fossil fuels contribute to global warming, pollution, and resource depletion.
4. Students gained knowledge about BEE and Star Rating, helping them choose energy-efficient appliances in real life.
5. Students learned practical energy-saving methods in domestic, commercial, and agricultural sectors, including power factor improvement using capacitors.

Sustainable Development Goal (SDG) Mapping

Focus Area	Related SDG	SDG Badge
Less pollution → improved public health	Good Health and Well-being	SDG 3
Energy efficiency and conservation	Affordable and Clean Energy	SDG 7
Reducing wastage of electricity and resources	Responsible Consumption and Production	SDG 12
Reducing greenhouse gas emissions through conservation	Climate Action	SDG 13
Reducing pollution and environmental damage from fossil fuel usage	Life on Land	SDG 15

Program Outcomes (PO) Mapping

Activity Aspect	Related PO
Understanding the importance of energy conservation and efficient utilization of electrical energy	PO1 – Engineering Knowledge
Analyzing causes of energy wastage and identifying methods to reduce consumption in domestic, commercial, and agricultural sectors	PO2 – Problem Analysis
Learning practical energy-saving solutions such as LED lighting, star-rated appliances, and power factor improvement	PO3 – Design/Development of Solutions
Awareness of the impact of fossil fuels, pollution, and global warming due to excessive energy consumption	PO6 – The Engineer and Society
Promoting sustainable practices through energy efficiency, renewable energy awareness, and reduced carbon footprint	PO7 – Environment and Sustainability
Understanding the role of BEE, energy conservation policies, and responsible citizen participation	PO8 – Ethics
Encouraging students to adopt energy-efficient habits and continue learning about sustainability and emerging energy technologies	PO12 – Life-long Learning



MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE (UGC-AUTONOMOUS)

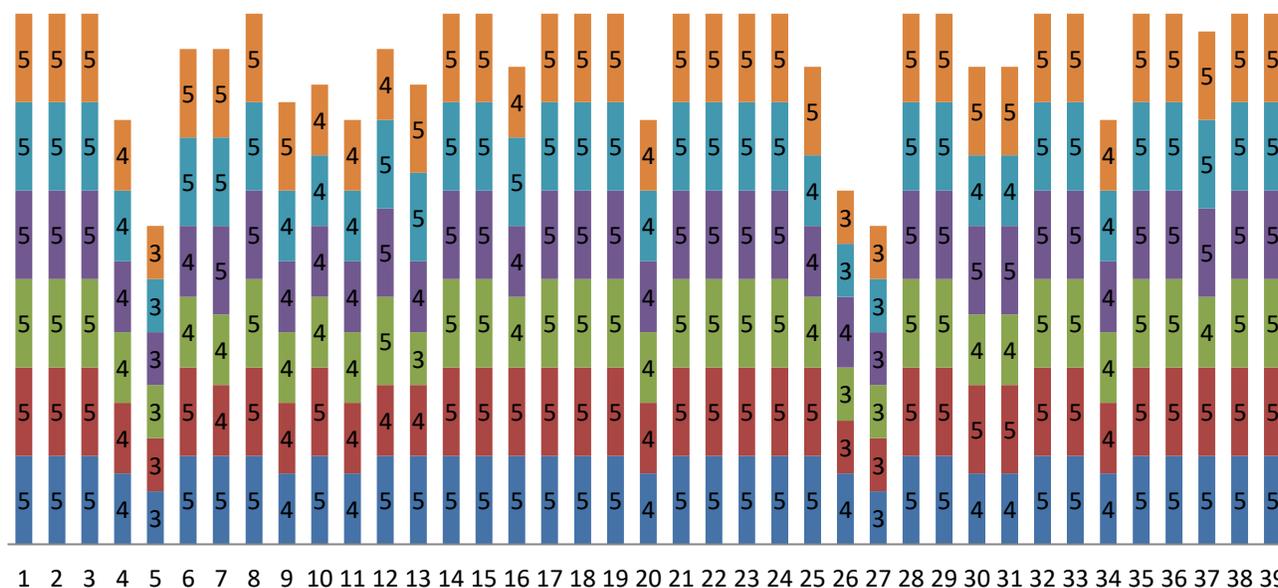


Affiliated to JNTUA, Anantapuramu & Approved by AICTE, New Delhi
Recognised Research Center, Accredited by NBA for CE, CSE, ECE, EEE, ME, MBA
& MCA, Recognised by UGC under the sections 2(f) and 12(B) of the UGC act 1956

Feedback:

Feedback on Industry Insight Session

- 6. Overall, the session was informative and valuable.
- 5. Your impression of facilities provided by the institute for interaction.
- 4. The presenter responded to questions in an informative, appropriate and satisfactory manner.
- 3. The information in the interaction was presented in a clear and organized manner.
- 2. The interaction was useful and resource person explanation was good.
- 1. The interactive session was scheduled at a suitable time



Conclusion:

The guest lecture program concluded on a successful note with an interactive session, where students actively participated and clarified their doubts with the Chief Guest. As a mark of respect and gratitude, the Chief Guest was honored with a shawl and a memento. Finally, the vote of thanks was delivered by the III Year student Ms. Reddy Neeraja, expressing sincere gratitude to the Chief Guest, dignitaries, faculty members, and students for their support and participation, which made the event a grand success.



MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE (UGC-AUTONOMOUS)

Affiliated to JNTUA, Anantapuramu & Approved by AICTE, New Delhi
Recognised Research Center, Accredited by NBA for CE, CSE, ECE, EEE, ME, MBA
& MCA, Recognised by UGC under the sections 2(f) and 12(B) of the UGC act 1956



Acknowledgments:

We thank our Chancellor, Pro Chancellor Vice Chancellor, Registrar, Principal, Vice-Principal-Administration, Dean (School of Engineering) and the HoD/EEE for giving us the permission to conduct such an insightful Industry Perspective Session. We also express our sincere gratitude to the Chief Guest, Mr. S. V. Mahesh Babu, for sparing his valuable time and delivering a wonderful and highly informative lecture for the benefit of the students.

Coordinator

Head of the Department/ EEE

Head of the Department
Electrical & Electronics Engineering
Madanapalle Institute of Technology & Science
MADANAPALLE - 517 325