

Name of the Chapter: PES/PELS/IAS Joint Chapter, IEEE Hyderabad Section

Name of the Activity: PES Day - Technical Talk on Sustainable Energy Solutions for a Brighter Future; Clean Energy, Smart Grids

Event Date: April 22, 2025 (Tuesday)

Event Time: 2:00 PM - 3:30 PM

Organizer: IEEE PES/PELS/IAS Joint Chapter, Hyderabad Section & IEEE MVSR PES Student Chapter, IEEE MVSR SB

Speaker: Speaker Details: Mr. K. Rajesh Kumar, Research Scholar, Annamalai University, IIC EEED Co-ordinator and Assistant Professor, EEED MVSREC.

Event Summary:

The PES/PELS/IAS Joint Chapter of Hyderabad Section in association with IEEE MVSR PES Student Chapter, IEEE MVSR SB has successfully conducted a PES Day Technical Talk on **"Sustainable Energy Solutions for a Brighter Future; Clean Energy, Smart Grids"** on 22nd April 2025 in MVSREC, Hyderabad. This talk was presented by Mr. K. Rajesh Kumar, Research Scholar, Annamalai University, IIC EEED Co-ordinator and Assistant Professor, EEED MVSREC. The technical talk aims to provide insights into the technologies and strategies driving this transformation.

Event Highlights:

1. Introduction and Welcome:

The program started with a warm welcome by Ms. K. Suvarna Durga Lakshmi, IEEE MVSR PES Treasurer and she has handed over the session to Dr. D. Hari Krishna, IEEE PES Day Ambassador, Vice Chair IEEE, PES Joint Chapter IEEE Hyderabad session and IEEE MVSR SB Counsellor. Dr. D. Hari Krishna has welcomed the attendees and conveyed PES Day 2025 and Earth Day greetings. He has provided the insights about the PES Day and PES Day 2025 theme, "Clean Energy, Smarter Grids, Better Lives". He has also elaborated about the topic of technical talk.

2. Speaker Introduction:

Ms. Suvarna Durga Lakshmi has introduced the technical talk speaker, Mr K. Rajesh Kumar, Research Scholar, Annamalai University, IIC EEED Co-ordinator and Assistant Professor, EEED MVSREC.

3. Technical Presentation:

Mr. K. Rajesh Kumar has delivered an engaging and informative presentation on "Sustainable Energy Solutions for a Brighter Future; Clean Energy, Smart Grids".

The key points covered in the presentation included:

- Introduction to Energy Resources
 - Types of conventional and non-conventional energy sources
 - Overview of clean and sustainable energy resources
- Current Clean Energy Challenges
 - Barriers to clean energy adoption
 - Importance of energy societies in promoting awareness and innovation
- Exploration of Renewable Energy Sources
 - Wind energy, hydro energy, and biomass energy
 - Sector-specific problems and possible solutions
- Smart Grid Technology
 - Role in energy management
 - Concepts of demand response, data analysis, and grid resilience
- Policies and Initiatives
 - National energy policies and regional programs
 - Global initiatives for renewable energy development
- Sustainability and Waste Management
 - Pros and cons of reducing consumption
 - Importance of effective waste management
- Community-Based Renewable Projects
 - Examples and benefits of locally driven initiatives
- Future Trends in Clean Energy
 - Innovations and expectations for the future of sustainable energy
- Case Study Presentation
 - Real-world example of a clean energy initiative
- Connection to World Health Day
 - Link between clean energy and public health
- Environmental Impact and Conclusion
 - Discussion on the environmental benefits of renewable energy
 - Inspirational message on sustainable practices and responsibility

4. Interactive Q&A Session:

Following the presentation, an interactive Q&A session was conducted. Participants had the opportunity to ask questions and engage in discussions with speaker.

5. Participant Engagement:

- The technical talk was well received with webinar was well received with 75 participants (10 IEEE Members and 65 Non-IEEE members) attracted a diverse audience, including IEEE members, students, staff and researchers.
- IEEE PES membership benefits were highlighted to participants at the beginning and end of the webinar.

6. Closing Remarks:

The closing remarks were given by Dr. D. Hari Krishna, Vice Chair, IEEE PES Joint Chapter, Hyderabad Section and IEEE PES Day Ambassador. Finally the Vote of Thanks was delivered by Mr. E.A.N.M. Karthik, Treasurer, IEEE MVSR PES Student chapter marked the end of the event.

Event Feedback:

The PES Day Technical Talk received highly positive feedback from participants, who appreciated the clarity and technical depth offered by Mr. K. Rajesh Kumar. His ability to convey complex energy concepts in an engaging and accessible manner was well-received. Attendees found the session informative, insightful, and relevant to current clean energy challenges. The seamless coordination by the organizing team ensured a smooth and professional experience, contributing significantly to the overall success of the event.

Outcomes:

- The session enhanced students' understanding of clean energy resources, ongoing research, and emerging opportunities in the energy sector.
- It also inspired attendees to actively support sustainable practices and explore professional development through IEEE.

Conclusion:

The event on **clean energy resources** was a great success, leaving students excited to attend more technical talks and learn from inspiring speakers in the field. The session provided valuable insights into the importance of clean energy, ongoing research, and future opportunities. The PES/PELS/IAS Joint Chapter of IEEE Hyderabad Section is committed to organizing more such informative and engaging sessions, continuing to support students' professional and personal growth in the field of energy.



Flyer of the Event



Dr. D. Hari Krishna, Vice Chair, IEEE PES Jt Chapter Hyderabad Section & IEEE PES Day Ambassador



Mr. K. Rajesh Kumar addressing the participants



Participants of the event



Group pic of the event