

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE (Deemed to be University)



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NAAC Accredited with A+ Grade, NIRF India Rankings 2024 - Band: 201-300 (Engg.)
NBA Accredited - B.Tech. (CIVIL, CSE, ECE, EEE, MECH, CST), MBA & MCA

A Report on Expert Talk on “Human-Centered Intelligent Robotics” Organized by Department of EEE in association with IEEE Student Chapter and IEEE PES Student Branch Chapter (SBC64791N) 13.10.2026



Chief Convenor: Dr. Manavalan G, Associate Professor and Head, Department of EEE, MITS.

Convenor: Dr. Vineet Kumar, Assistant Professor, Department of EEE.

Attendees: 48 Students and faculty members.

Venue: Seminar Hall A

Time: 2:00 PM

Background

The Department of Electrical and Electronics Engineering, Madanapalle Institute of Technology & Science (Deemed to be University), organized an Expert Talk on “Human-Centered Intelligent Robotics” on 13 October 2026 as part of the IEEE Days 2026 celebrations.

The event was organized in association with the IEEE Student Chapter and IEEE PES Student Branch Chapter (SBC64791N). The session featured Prof. Felix Orlando Maria Joseph, Associate Professor, Department of Electrical Engineering, Indian Institute of Technology Roorkee, as the resource person.

The talk aimed to introduce participants to human-centered robotics and highlight the role of robotic systems, sensing, feedback, and control in developing technologies that address human needs.

Speaker Details

Prof. Felix Orlando Maria Joseph, SIEEE, is an Associate Professor in the Department of Electrical Engineering at the Indian Institute of Technology Roorkee.

He has more than a decade of academic experience at IIT Roorkee and previously served as a Postdoctoral Fellow at Case Western Reserve University. His research experience includes sensor fusion, real-time control algorithms, and system integration.

His research interests and work include robotics, the design and control of a hand exoskeleton to support people with impaired hand function, and a robot-guided flexible needle system using imaging feedback. His academic background includes a Ph.D. in Electrical Engineering from IIT Kanpur and a master’s degree in HCI and Robotics from KIST, Seoul, South Korea.



Detailed Summary of the Event

The expert talk was conducted on 13 October 2026 at 2:00 PM in Seminar Hall A as part of the IEEE Days 2026 celebrations. The session brought students and faculty members together to learn about developments in intelligent robotics and its human-centered applications.

The event commenced with a welcome address by Dr. Vineet Kumar, Assistant Professor, Department of EEE and Convenor of the event, who welcomed the resource person, faculty members, and students. He briefly introduced the theme of the expert talk, “Human-Centered Intelligent Robotics,” and highlighted its relevance in advancing robotics research and developing intelligent robotic systems centered on human needs. Following this, Dr. Manavalan G, Associate Professor and Head of the Department of EEE, addressed the gathering and emphasized the importance of expert interactions in bridging theoretical knowledge with practical applications and encouraging students to explore emerging technologies in robotics and automation.

Prof. Felix Orlando Maria Joseph delivered the expert talk on “Human-Centered Intelligent Robotics.” The session focused on the relevance of robotics in addressing human needs and on the importance of integrating sensing, feedback, control algorithms, and system-level design in robotic applications.

The talk connected the theme with areas including:

- Human-centered robotic systems and their applications.
- Sensor fusion and feedback-based control for robotic systems.
- Design and control of hand exoskeletons to support people with impaired hand function.
- Robot-guided flexible needle systems using imaging feedback for medical interventions.
- Real-time control algorithms and system integration in robotics.

The speaker’s research experience illustrated how robotics and control engineering can contribute to assistive technologies and precision applications.

The session provided an opportunity for participants to engage with the resource person and deepen their understanding of robotics research and its practical applications.

The event concluded with a vote of thanks from Dr. Vineet Kumar, acknowledging the institute leadership, the Head of the Department of EEE, the resource person, faculty members, and student volunteers for their support and contributions to the successful conduct of the programme.

SDG Mapping

The expert talk is relevant to SDG 9 – Industry, Innovation and Infrastructure, through its focus on robotics research and technological innovation. It also relates to SDG 3 – Good Health and Well-being, particularly through assistive robotics and robotic systems for medical interventions, and SDG 4 – Quality Education, by providing students with exposure to current research and emerging engineering applications.

POs Mapping

The event supports PO1 (Engineering Knowledge) and PO2 (Problem Analysis) by exposing participants to robotic systems and their engineering applications. It is relevant to PO3 (Design/Development of Solutions) through discussion of assistive and medical robotics, PO5 (Modern Tool Usage) through sensing, imaging feedback, and control methods, and PO12 (Life-long Learning) through engagement with an expert in the field.

Outcome of the Event

The expert talk provided students and faculty members with exposure to human-centered intelligent robotics and related research areas.

- Participants gained an overview of the role of sensing, feedback, control, and system integration in robotic applications.
- The session introduced examples of assistive robotics, including hand exoskeletons, and precision medical robotics.
- The talk encouraged participants to explore robotics, control systems, and interdisciplinary research opportunities.
- The event strengthened academic interaction with a domain expert from IIT Roorkee as part of IEEE Days 2026 celebrations.

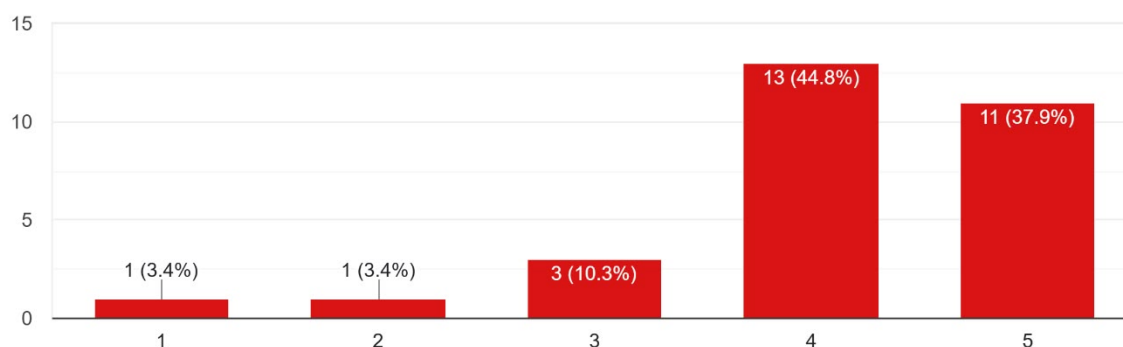
Overall, the event promoted awareness of human-centered robotics and its potential contribution to assistive technologies, healthcare, and advanced engineering applications.



Feedback

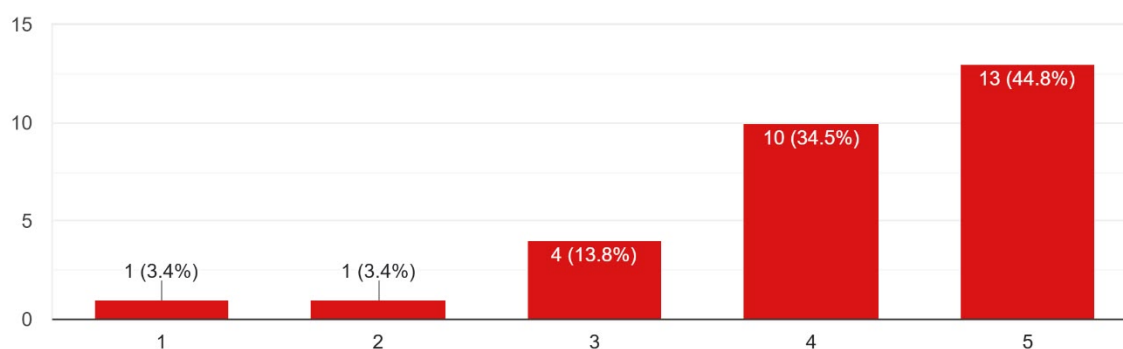
1. The interactive session was scheduled at a suitable time

29 responses



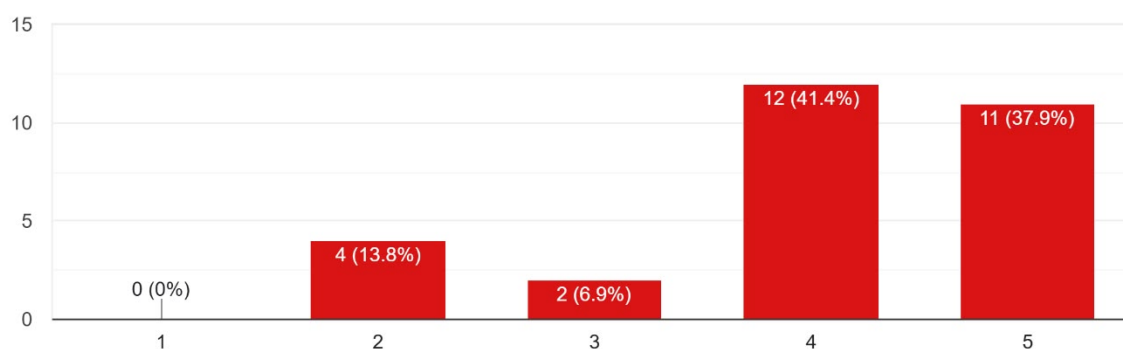
2. The interaction was useful and resource person explanation.

29 responses



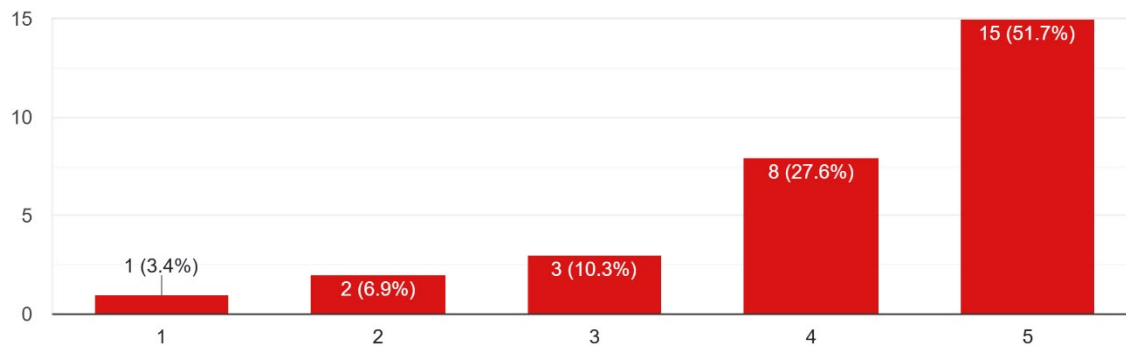
3. The information in the interaction was presented in a clear and organized manner.

29 responses



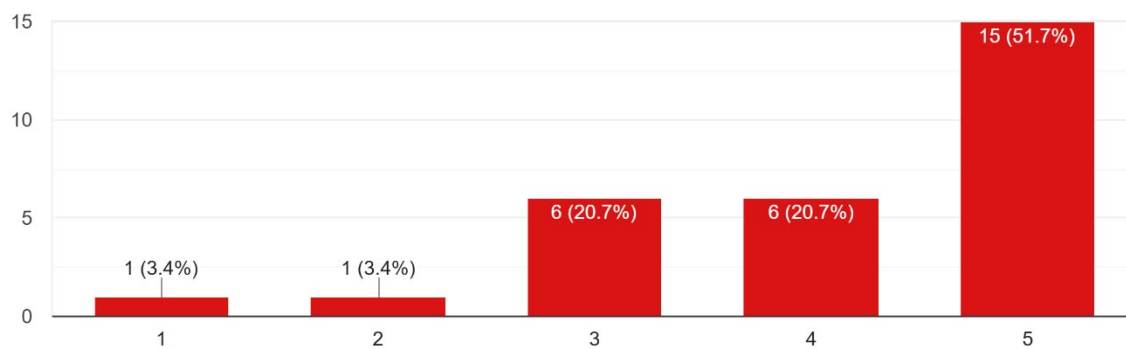
4. The presenter responded to questions in an informative, appropriate and satisfactory manner.

29 responses



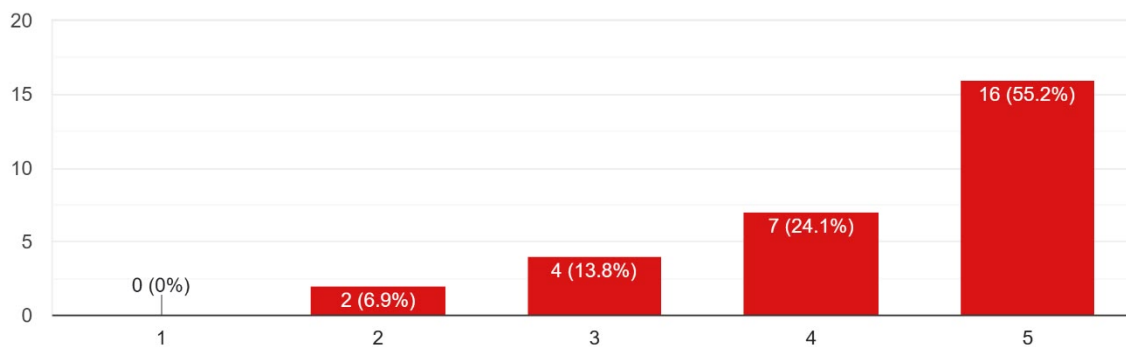
5. your impression of facilities provided by the institute for interaction.

29 responses



6. Overall, the session was informative and valuable.

29 responses



With regards,

Dr. Vineet Kumar
Assistant Professor, Department of EEE & IEEE/ISTE Coordinator,
MITS, Madanapalle.