A Report on
State Level Competition on
Optical Wireless Practices 3.0

Date:	5 April, 2025
Time:	10:00 AM to 5:00 PM
Venue:	AV Room, ECE Department, SCET
Student coordinators:	Ruchi Singhi, Mudhit Saboo, Vipul Gupta
Faculty coordinators:	Prof. (Dr.) Pranav B Lapsiwala, Prof. Chhaya Suratwlaa
Participants:	Total 108 students participated in the event.
Speakers / Resource Person	Prof. Foram Dharsandia
About Event:	State Level Competition
Schedule of Event:	
Key Highlights of the event:	The competition centered on optical-wireless communication systems, sensors, Li-Fi technology, and cutting-edge innovations in the field.
Content Beyond Syllabus:	1. Implementing hardware and software prototypes for real-world applications in communication, sensing, and signal processing. 2. Exploring recent research papers and technological trends.
Major Outcome:	The competition served as a valuable learning experience, fostering innovation and collaboration among future engineers.

To ignite innovation and curiosity in the realm of next-generation communication systems, the Department of Electronics and Communication Engineering organized a **State Level Competition – "Optical-Wireless Practices 3.0."** This event was specially curated for undergraduate engineering students, with technical collaboration from the **MWTC Club, EC Department**, and the **IETE Surat Sub-center**.

The competition was designed to motivate students to delve into the importance of **Optical-Wireless Systems**, **Optical Sensors Li-Fi Technology, Advanced Antenna design**, and their real-world applications. It aimed to provide a platform for young minds to present innovative ideas, explore system-level performance analysis, and investigate commercialization prospects of Optical-Wireless technologies.

Organized *by the students, for the students* under faculty mentorship, the event served as a dynamic space for students to showcase both **technical proficiency and soft skills**. **Prof. Foram Dharsandia** from Vanita Vishram Woman's University*, Surat*, was invited as the jury to evaluate and guide the participants.

Key Point of the State Level Completion "Optical - Wireless Practice 3.0"

1. **Category 1: Design – Theory to Practice**
   Participants engaged in simulation, design, and analysis of Optical-Wireless circuits, systems, sub-systems, and antennas design. Projects included algorithmic implementations, methodologies, and experimental outcomes, with the option to submit applied research or review paper implementations.

2. **Category 2: Poster Competition**
   This category encouraged students to visually communicate Optical-Wireless concepts, including applications, design methodologies, system architectures, algorithmic flow, and contemporary challenges like RF and SSD hazards, all through creative and informative posters.

3. **Category 3: Art and Intellect**
   A unique blend of creativity and technology, this category welcomed artistic expressions in the form of **poems, stories, drawings, collages**, or case studies—all centered around Optical-Wireless System design and application.

Outcomes

1. **Design (Theory to Practice):**
   Students explored and analyzed research literature and presented their findings creatively. They also developed hardware prototypes and utilized simulation tools for the design and performance analysis of Optical-Wireless systems and components.

2. **Art & Intellect Segment:**
   This category brought out the creative and communicative abilities of students, encouraging them to blend technical knowledge with storytelling, writing, and visualization—enhancing soft skills in a competitive and collaborative environment.

3. **Poster Competition:**
   Participants demonstrated literature synthesis, poster aesthetics, and structured content organization. Their work effectively communicated system designs and technical insights to the audience.

4. **Leadership and Organizational Skills:**
   Beyond technical learning, students gained valuable experience in **planning, coordination, and execution**, strengthening their **administrative and leadership capabilities**—a lifelong asset for professional growth.

Information - Announcement – Registration Poster

Session Conduction

Felicitation to Jury

Prize Distribution to Winners

The Team

Report Prepared and Compiled by,

Prof. (Dr.) Pranav B Lapsiwala & Prof. Chhaya Suratwala,
Co-ordinators,
Optical Wireless Practices 3.0