A State Level Competition

on

“Optical - Wireless Practices 1.0”

Organized by

E&C Engineering Department,
Sarvajanik College of Engineering & Technology,
Sarvajanik University

In
Association with

IETE Surat Sub center

Technically Co-sponsored by,

Mobile and Wireless Technology Club (MWT) – E&C Engineering Department

The Team

Head of Department:

Prof.(Dr.) Chirag Paunwala	HoD, EC Dept, SCET

Faculty Coordinators:

Dr. Pranav B Lapsiwala	EC Dept, SCET
Prof. Chhaya Suratwala	EC Dept, SCET
Prof. Swathi Kundaram	EC Dept, SCET

Student Coordinators:

Mr. Neel Gandhi	EC SEM 6 , SCET
Ms. Kavita Swami	EC SEM 6 , SCET
Ms. Priyanshi Patel	EC SEM 6 , SCET

Student Volunteer:

Drashti Domadiya	EC SEM 6 , SCET
Shruti Savani	EC SEM 6 , SCET
Druvil Fulwala	EC SEM 6 , SCET

Details of Event

Event Type:	State Level Competition
Event Platform:	Physical Mode
Category:	Technical Activities under Competition category, AC year 2023-24
Schedule:	6th April, 2024, 11:00 PM to 5:00 PM
Aspirants:	Undergraduate Students of Engineering & Technology
Accessibility:	Undergraduate Engineering Students
Technical Sponsored:	IETE Surat Sub Center of Rs. 3000/-
Technical Co-Sponsored:	Mobile and Wireless Technology Club, E&C Engineering Department, SCET-Surat.
Jury:	Prof. Avani Lakhani , Head E&C Engineering Dept., Shree Swami Atmanand Saraswati Institute of Technology, Surat

No. of Present Participants: Total 80+ Students participation for different categories.

About Optical - Wireless Practice 1.0

To motivate and encourage the students to explore the importance of Optical-Wireless System, Next generation Antennas and Optical- wireless application, Electronics and Communication Engineering Department is organizing State Level Competition on **"Optical-Wireless Practices 1.0"**. Competition is planned for UG students from engineering colleges. The event is technically collaborated with MWTC Club, EC Dept., and IETE Surat Sub center.

The objective of this event is to motivate and encourage the students to explore the importance of Wireless Communication System, Subsystem, and components design and performance analysis for next generation wireless application. Competition aims to provide platform to students for the submission of their ideas for Optical – Wireless System and their application in commercialization. Identify novel approaches to analysis of system performance.

These events are organized, for the students, by the students and faculties. These events provide students an opportunity to showcase their technical and soft skills and talent. Prof. Avani Lakhani, from Shree Swami Atmanand Saraswati Institute of Technology, Surat, was **Jury for the competition**.

Key Point of the State Level Completion "Optical - Wireless Practice 1.0"

1. **Category -1: Design: Theory to Practice:** Simulation, Implementation, Design and Analysis of Optical - Wireless circuits, system, sub-system, antennas design & implementation, methodology – algorithm outcome for given application, Research paper OR Review paper implementation.
2. **Category -2: Poster Competition:** Make a Poster of Optical- Wireless theory concepts, application, design specific system, subsystem, circuits, algorithms, methodology discussion, Hazards effect due to optical-wireless system, RF Hazards, SSD hazards, recent trends in optical – wireless technology.
3. **Category -3: Art and Intellect for Antenna:** Write poem, story (Drama), Drawing, collage, Comprehensive for Optical – Wireless System design, application, case study.

Outcomes

1. The category of Design: Under Theory to Practice category students explore the different research article and their analysis work presentation on time scale with creative way to summarise the information in literature form. In addition, students develop different hardware design for communication, sensing application. Students explore the utilization of simulation tool for optical-wireless system/ components design and their performance analysis.
2. The theme of art and intellect embedded in competition extract the skill of soft skill with technology, thought process, translate, write, communication, learning in competitive environment as an individual or team member.
3. Poster making: In this category students has shown creativity, the skill of identification of literature with organized and structure information for poster design. The aesthetics of the poster to effectively communicate the purpose and function of the Optical – Wireless System, Sub-System, Components.
4. The competition gives the lifelong learning experience to students with administration and leadership skill for organize such event.

Participant & Winner of Event Certificate Copy

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SARVAJANIK COLLEGE OF ENGINEERING AND TECHNOLOGY
ELECTRONICS & COMMUNICATION ENGINEERING DEPARTMENT
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MWTC

Certificate

This is to certify that Mr./Ms. _____ from _____ has Participated in the State Level Competition, "Optical Wireless Practices 1.0" on 6th April 2024, organized by the Electronics and Communication Engineering Department, Sarvajanik College of Engineering and Technology, Surat in association with IETE sub-center Surat and MWTC Club.

Prof. Chhaya Suratwala (Co-ordinator) SCET	Prof.(Dr.) Pranav Lapsiwala (Co-ordinator) SCET	Prof.(Dr.) Chirag Paunwala Head Of Department SCET

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MWTC

Certificate

This is to certify that Mr./Ms. _____ from _____ has secured _____ position in the State Level Competition, "Optical Wireless Practices 1.0" on 6th April 2024 for Category _____, organized by the Electronics and Communication Engineering Department, Sarvajanik College of Engineering and Technology, Surat, in association with IETE sub-center Surat and MWTC Club.

Prof. Chhaya Suratwala (Co-ordinator) SCET	Prof.(Dr.) Pranav Lapsiwala (Co-ordinator) SCET	Prof.(Dr.) Chirag Paunwala Head Of Department SCET

Information - Announcement – Registration Poster

Session Conduction – Glimpse of the Event

List of Participants

Participation category 1 Design: Theory to practice				
Sr.no.	Team leader	Team members	Sem	Title
1	Ansh dobariya	Khushi Harkhani Ansh dobariya Sahil Goti	6	Fiber Optics Communication Using Arduino Uno Board
2	Jeel Ramani	Sarthak Bosamiya Priyanshi Patel Jeel Ramani	6	Speed Detector using Wireless System
3	Neel Khanpara	Neel Khanpara Aarchi Limbachiya	6	Optinet: Enhanced Connectivity
4	Sumit Patel	Sumit Patel Harshita Pandit	6	Optical Sensor for detection of dirt level in water

Participation category 2 Poster Making Competition				
Sr.no.	Team leader	Team members	Sem	Title
1	Ansh Dobariya	Ansh Dobariya Khushi Harkhani Sahil Goti	6	Next Generation Optical Communication and Components
2	Keshvi Gandhi	Keshvi Gandhi Aarchi Limbachiya	6	Li-Fi Technology
3	Jeel Ramani	Jeel Ramani Sarthak Bosamiya Priyanshi Patel	6	Speed Detector
4	Shivangi Y Vyas	Shivangi Y Vyas Shruti Savani	6	Detection Tools For Fiber Optical Communication Fault
5	Gneya Chaudhari	Gneya Chaudhari Aarya Lokhandwala	6	Free Space Optics (Fso)
6	Preet Gohil	Preet Gohil Akshay Santoki	6	Business Associated With Fiber Optics
7	Anirban Jana	Anirban Jana Kamil Shaikh	6	Free Space Optics (Fso)
8	Niyati Majumdar	Niyati Majumdar Harshita Pandit	6	Li-Fi Technology And Implementation Challenges
9	Dhruvil Fulwala	Dhruvil Fulwala Vansh Dalal Dhrumil Moga	6	Free Space Optics (Fso)
10	Neel Khanpara	Neel Khanpara Harshil Dumasia Harshit Jain	6	Free Space Optics (Fso)
11	Chahi Tejani	Chahi Tejani Sumit Patel Vatsa Noticewala	6	Free Space Optics (Fso)
12	Sayam Jain	Raj Jariwala Aditiyanarayan Jha	6	Free Space Optics (Fso)
13	Dev Joshi	Dev Joshi Alok Mevawala	6	Fiber-Optic Based Lidar System Combining Technologies For Advanced Ranging
14	Jeet Gandhi	Jeet Gandhi Umang Gujarathi	6	Wearable Antenna For Iot Application
15	Priyansh Rander	Priyansh Rander Deepak Nair Pratham	6	Antennas In Chandrayaan
16	Khushi Banka	Om Katariya Khushi banka	6	Quantum Cascade Laser And Li-Fi Technology

Participation category 3 Art and Intellect				
Sr.no.	**Team leader**	**Team members**	**Sem**	**Title**
1	Ansh Dobariya	Ansh Dobariya Khushi Harkhani Sahil Goti	6	Poem on Wireless (English)
2	Harshita Pandit	Harshita Pandit	6	Poem on Optics (English)
3	Sayam Jain	Sayam Jain Raj Jariwala	6	Shayari on Wireless System (Hindi)
4	Khushi Banka	Khushi Banka Diwanshi Dugar	6	Drama and Interaction of Optical Fiber and Antenna (Hindi)
5	Khushboo Jha	Drashti Domadiya Shruti Savani Khushboo Jha	6	Poem on Global Observing System Poem (English)
6	Neel Khanpara	Neel Khanpara Harshit Jain Harshil Dumasia	6	Poem on Optical system (Hindi)
7	Keshvi Gandhi	Keshvi Gandhi	6	Poem on Optical System with Actions (Hindi)

List of Winners

1 Design: Theory to Practice					
Position	**Team Leader**	**Team members**	**Year/ SEM**	**College, Branch,**	**Title**
1st	Jeel Ramani	Sarthak Bosamiya Priyanshi Patel Jeel Ramani	3rd year/6th sem	SCET/ EC	Speed Detector using Wireless System
2nd	Ansh dobariya	Khushi Harkhani Ansh dobariya Sahil Goti	3rd year/6th sem	SCET/ EC	Fiber Optics Communication Using Arduino Uno Board
3rd	Sumit Patel	Sumit Patel Harshita Pandit	3rd year/6th sem	SCET/ EC	Optical Sensor for detection of dirt level in water
2 Poster Making Competition					
Position	**Team Leader**	**Team members**	**Year/ SEM**	**College, Branch,**	**Title**
1st	Dev Joshi	Dev Joshi Alok Mevawala	3rd year/6th sem	SCET/ EC	Fiber-Optic Based Lidar System Combining

2nd	Dhruvil Fulwala	Dhruvil Fulwala Vansh Dalal Dhrumil Moga	3rd year/6th sem	SCET/ EC	Free Space Optics (FSO)
3rd	Priyansh Rander	Priyansh Rander Deepak Nair Pratham	3rd year/6th sem	SCET/ EC	Antennas In Chandrayaan

3 Art and Intellect

Winner	Team Leader	Team members	Year/ SEM	College Branch	Title
1st	Keshvi Gandhi	Keshvi Gandhi	3rd Year/6th Sem	SCET/ EC	Poem on Optical System with Actions (Hindi)
2nd	Khushi Banka	Khushi Banka Diwanshi Dugar	3rd Year/6th Sem	SCET/ EC	Drama and Interaction of Optical Fiber and Antenna (Hindi)
3rd	Khushboo Jha	Drashti Domadiya Shruti Savani Khushboo Jha	3rd Year/6th Sem	SCET/ EC	Poem on Global Observing System Poem (English)

More detail on competition is available over

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