

Andhra Christian college

(Day, Evening and PG)

NOTICE

Date: 09-12-2021

This is to inform you that there will be a seminar on “**OPTICS(DIFRACTION),**” tomorrow, i.e., on 10-12-2021 to be conducted by the department of physics, at 11 AM.

Dr. A. Ramesh Babu, Professor Department of Physics, B.E.C Bapatla. Will be address the seminar. All the students of IIB.Sc. are instructed to attend the programme without fail.




Principal
PRINCIPAL
ANDHRA CHRISTIAN COLLEGE
(Day, Evening & P.G.)
GUNTUR

Copy to:

1. The coordinator, IQAC, Andhra Christian College
2. The office manager, Andhra Christian College

Andhra Christian College::Guntur

Department of Physics

Seminar Report on "Optics"

Organized by: Department of Physics, Andhra Christian College, Guntur

Date: 10 – 12 – 2021

Time: 11:00 AM

Venue: Department of Physics, Andhra Christian College, Guntur

Resource Person: Dr. A. Ramesh Babu, Professor of Physics, Bapatla College of Engineering, Bapatla

Participants: B.Sc. students and faculty of the Department of Physics

1. Introduction

The Department of Physics at Andhra Christian College, Guntur, organized a seminar on the topic "Optics" on 10th December 2021. The seminar was designed to provide B.Sc. students with an in-depth understanding of the principles of optics, covering both theoretical concepts and practical applications. The session was led by Dr. A. Ramesh Babu, a distinguished Professor of Physics from Bapatla College of Engineering, Bapatla, who has extensive expertise in the field of optics.

2. Objectives of the Seminar

The primary objectives of the seminar were:

- **To introduce fundamental concepts of optics:** The seminar aimed to explain the basic principles of optics, including the behaviour of light, reflection, refraction, diffraction, and polarization.
- **To explore the mathematical framework of optics:** Participants were introduced to the mathematical models that describe optical phenomena, such as Snell's law, the wave equation, and the principles of interference and diffraction.
- **To discuss the practical applications of optics:** The seminar aimed to demonstrate the practical applications of optics in various fields, including optical instruments, fiber optics, and laser technology.
- **To highlight recent advancements in optical science:** The seminar sought to inform participants about the latest developments and research trends in the field of optics, including advancements in photonics and quantum optics.
- **To inspire academic curiosity and research interest:** The seminar aimed to encourage students to pursue further studies and research in optics, fostering a deeper interest in the subject.

3. Summary of the Seminar

The seminar began with an opening address by Dr. P. Michael Vinaya Teja, Head of the Department of Physics, who welcomed Dr. A. Ramesh Babu and the participants.

Dr. Ramesh Babu commenced the session with a comprehensive overview of the fundamental concepts of optics. He explained the nature of light as both a wave and a particle, emphasizing the dual nature of light and its implications for understanding optical phenomena.

Dr. Ramesh then delved into the core principles of reflection and refraction, discussing Snell's law and its applications in understanding how light behaves at the interface of different media. The seminar also covered the concepts of diffraction and interference, with Dr. Ramesh providing detailed explanations of how these phenomena can be observed and utilized in practical applications.

One of the highlights of the seminar was the discussion on polarization, where Dr. Ramesh Babu explained the significance of polarized light in various optical technologies, including 3D displays and optical communication systems. He also introduced participants to the mathematical framework used to model and predict optical behaviour, which is essential for advanced studies in physics.

In addition to theoretical knowledge, Dr. Ramesh Babu highlighted the practical applications of optics in everyday life and advanced technologies. He discussed the role of optics in the development of optical instruments such as microscopes and telescopes, the importance of fiber optics in telecommunications, and the transformative impact of laser technology across multiple industries.

The seminar concluded with a discussion on recent advancements in optical science, including cutting-edge research in photonics and quantum optics and vote of thanks by Dr. M. Ratna Raju, Senior lecturer. Dr. Ramesh Babu encouraged students to consider optics as a field of research, emphasizing the exciting possibilities and career opportunities available in this area.

Throughout the seminar, students and faculty members engaged actively by asking questions and participating in discussions, which enhanced the interactive nature of the session.

4. Outcomes of the Seminar

The seminar successfully achieved its objectives, leading to the following outcomes:

- **Enhanced understanding of optical principles:** Participants gained a thorough understanding of the basic and advanced concepts of optics, which is crucial for their academic growth and future studies.
- **Improved analytical skills:** The mathematical discussions and problem-solving exercises helped students develop their analytical skills, particularly in applying theoretical models to practical scenarios.
- **Awareness of practical applications:** Students were made aware of the significant role that optics plays in various technologies, which broadened their perspective on the subject's relevance to real-world applications.
- **Increased interest in optics research:** The seminar sparked curiosity among students to explore research opportunities in optics and related fields, potentially leading to academic projects or further studies.

- **Strengthened academic engagement:** The interactive nature of the seminar fostered closer interaction between students, faculty, and the resource person, contributing to a more collaborative academic environment.

5. Conclusion

The seminar on "Optics" organized by the Department of Physics, Andhra Christian College, Guntur, was an informative and engaging event. Dr. A. Ramesh Babu delivered a comprehensive presentation that effectively covered both theoretical and practical aspects of optics. The seminar met its objectives, providing participants with valuable knowledge and insights, and encouraging further academic inquiry into the fascinating field of optics.



Andhra Christian College, Guntur

Department of Physics

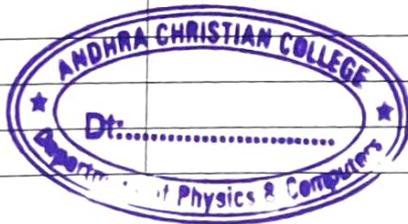
List of Students Attended for SEMINAR CLASS

TOPIC: Diffractin

Date: 10.12.2021

Class: IInd B.Sc

S. No.	Class No	Name of the Students	Signature
1.	601.	B. Shyam Kumar.	B. Shyam Kumar
2.	605.	M. Mahendra Babu.	M. Mahendra Babu
3.	603.	G. Naga Raju	G. Naga Raju
4.	608.	N. Prem Babu.	N. Prem Babu
5.	610.	M. Nageswara Rao	M. Nageswara Rao
6.	614.	B. Vijaya Varma.	B. Vijaya Varma
7.	618.	K. Murali	K. Muxali
8.	620.	M. Bharath Naik	M. Bharath Naik
9.	622.	T. Jagadeesh	T. Jagadeesh
10.	623.	K. Chaitanya.	K. Chaitanya
11.	626.	R. Sai Kumar.	R. Sai Kumar
12.	628.	P. Anil.	P. Anil
13.	1401.	P. Thomas.	P. Thomas
14.	1403.	G. Kinsingh	G. Kinsingh
15.	1404.	M. Koteswara Rao	M. Koteswara Rao
16.	1406.	A. Sudhakar	A. Sudhakar
17.	1408.	P. Sameera	P. Sameera
18.	1410.	D. Harshini	Harshini
19.	1412.	B. Yestheru Babu	Yestheru Babu
20.	1415.	M. Maheswar Reddy.	M. Maheswar Reddy.
21.	1417.	K. Vyshanavi	K. Vyshanavi
22.	1418.	D. Durga Rao	D. Durga Rao
23.	1420.	G. Srinu.	G. Srinu
24.	1423.	K. John Wesley.	K. John Wesley
25.	1424.	M. Gopi Chand.	M. Gopi Chand
26.	1425.		
27.			
28.			
29.			
30.			



M. Maheswar Reddy
 HOD
 Department of Physics
 A.C. College, Guntur.