

Andhra Christian college

(Day, Evening and PG)

NOTICE

Date: 21-12-2019

This is to inform you that there will be a seminar on "**MOVING CHARGES AND MAGNETISM**" tomorrow, i.e., on 22-12-2019 to be conducted by the department of physics, at 11 AM. DR. D.V. Raghu Ram, Lecturer Department of Physics, Hindu College, Guntur Will be address the seminar.

All the students of III B.Sc. are instructed to attend the programme without fail.




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

Andhra Christian College::Guntur

Department of Physics

Seminar Report on "Moving Charges and Magnetism"

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

Date: 22-12-2019

Time: 11:00 AM

Venue: Department of Physics, Andhra Christian College, Guntur

Resource Person: Dr. D. V. Raghu Ram, Lecturer in Physics, Hindu College, Guntur

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

1. Introduction

The Department of Physics, Andhra Christian College, Guntur, organized an insightful seminar on the topic "Moving Charges and Magnetism" on 22nd December 2019. The seminar was aimed at enhancing the understanding of B.Sc. students regarding the fundamental concepts of electromagnetism, specifically focusing on the relationship between moving charges and magnetic fields. The session was conducted by Dr. D. V. Raghu Ram, a respected Lecturer in Physics from Hindu College, Guntur, known for his expertise in the field.

2. Objectives of the Seminar

The seminar had the following key objectives:

- **To introduce the concept of moving charges and magnetism:** The seminar aimed to explain the fundamental relationship between electric currents and magnetic fields, including the Biot-Savart law and Ampere's Circuital law.
- **To explore the principles of electromagnetism:** Participants were introduced to the principles governing the interaction of moving charges with magnetic fields, including the force experienced by a charged particle in a magnetic field (Lorentz force).
- **To demonstrate the applications of magnetism in technology:** The seminar aimed to illustrate the practical applications of magnetism in various technological advancements, such as in the functioning of electric motors, generators, and transformers.
- **To encourage critical thinking and problem-solving:** The seminar aimed to develop the problem-solving skills of students by discussing real-world scenarios where the concepts of moving charges and magnetism are applied.
- **To foster academic curiosity and research interest:** The seminar sought to inspire students and faculty to delve deeper into the study of electromagnetism and its applications, encouraging future research and exploration in the field.

3. Summary of the Seminar

The seminar began with an opening address by the Head of the Department of Physics, who welcomed Dr. D. V. Raghu Ram and the participants. Dr. Raghu Ram then initiated the session by introducing the fundamental concepts of moving charges and their interaction with magnetic fields. He explained the Biot-Savart law and Ampere's Circuital law, which describe how moving charges create magnetic fields and how these fields are structured.

Dr. Raghu Ram provided a detailed explanation of the Lorentz force, illustrating how a charged particle experiences a force when it moves through a magnetic field. The seminar also covered the concept of magnetic field lines and their significance in visualizing the direction and strength of magnetic fields.

The resource person further elaborated on the practical applications of these principles, particularly in the design and operation of electric motors, generators, and transformers. These examples helped students understand the relevance of electromagnetism in everyday technology.

Throughout the seminar, students were encouraged to ask questions and engage in discussions, which fostered an interactive learning environment. Dr. Raghu Ram also presented several problem-solving scenarios, allowing students to apply the concepts they had learned to real-world situations.

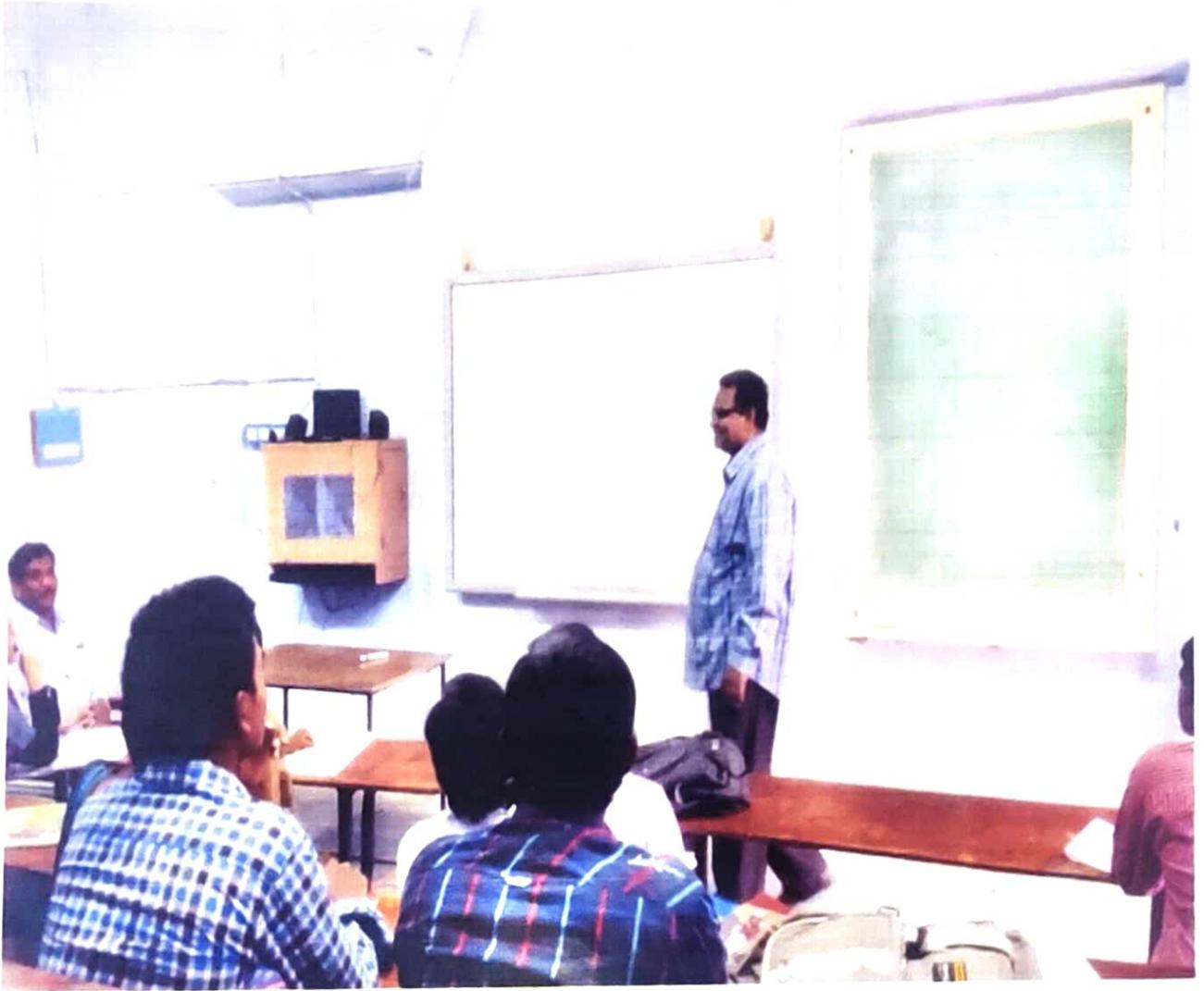
4. Outcomes of the Seminar

The seminar successfully achieved its objectives, resulting in the following outcomes:

- **Enhanced understanding of electromagnetism:** Students gained a deeper understanding of the relationship between moving charges and magnetic fields, which is crucial for their academic development in physics.
- **Improved problem-solving skills:** Through interactive discussions and problem-solving exercises, students were able to apply theoretical concepts to practical situations, enhancing their analytical abilities.
- **Increased interest in advanced physics topics:** The seminar sparked curiosity among students to explore more advanced topics in electromagnetism and related fields.
- **Encouraged faculty-student interaction:** The seminar provided an opportunity for students to engage with faculty members and the resource person, fostering a collaborative academic environment.
- **Potential research initiatives:** The seminar inspired faculty and students to consider potential research projects in electromagnetism, contributing to the academic growth of the department.

5. Conclusion

The seminar on "Moving Charges and Magnetism" organized by the Department of Physics, Andhra Christian College, Guntur, was a highly educational and engaging event. Dr. D. V. Raghu Ram delivered an informative presentation that successfully conveyed complex concepts in an accessible manner. The seminar met its objectives, leaving participants with a solid understanding of the topic and a renewed interest in the study of electromagnetism.



Andhra Christian College, Guntur

Department of Physics

List of Students Attended for SEMINAR CLASS

TOPIC: Moving Charges and Magnetism

Date: 22.12.19

Class: IIIrd BSc

S. No.	Class No	Name of the Students	Signature
1.	601	T. Divaya Bharathi	T. Divaya Bharathi
2.	602	S.K. Shaikhan	S.K. Shaikhan
3.	603	T. Priya Geetha Reddy	T. Priya Geetha Reddy
4.	604	M. Anusha	M. Anusha
5.	605	D. Kiran Badi	D. Kiran Badi
6.	608	K. Saibabu	K. Saibabu
7.	610	K. Siva Sankar	K. Siva Sankar
8.	611	I. Deva Sahayam	I. Deva Sahayam
9.	612	D. Sunny Kumar	D. Sunny Kumar
10.	613	P. Anil	P. Anil
11.	614	D. Prajanth Kumar	D. Prajanth Kumar
12.	615	J. Bujji	J. Bujji
13.	620	D. Badri	D. Badri
14.	628	K. Ramesh	K. Ramesh
15.	645	B. AJAY BABU.	B. AJAY BABU.
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[Signature]
 Department of Physics
 A.C. College, Guntur.

