

Andhra Christian college

(Day, Evening and PG)

NOTICE

Date: 04-12-2020

This is to inform you that there will be a seminar on “DISPLAY DEVICES AND MATERIAL” tomorrow, i.e., on 05-12-2020 to be conducted by the department of physics, at 11 AM. Dr. B. Walter, Lecturer Department of Physics, P.B.N College, Nidubrolu Will be address the seminar. All the students of III B.Sc. are instructed to attend the programme without fail.



Principal
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GUNTUR

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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 "Display Devices and Material"

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

Date: 05 – 12 – 2020

Time: 11:00 AM

Venue: Department of Physics, Andhra Christian College, Guntur

Resource Person: Dr. B. Walter Ratna Kumar, Lecturer in Physics, PBN College, Nidubrolu

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 "Display Devices and Material" on 20th August 2020. The seminar aimed to provide B.Sc. students with an in-depth understanding of the principles, technologies, and materials used in modern display devices. The session was led by Dr. B. Walter Ratna Kumar, a Lecturer in Physics at PBN College, Nidubrolu, who has specialized in LED phosphors through his Ph.D. research.

2. Objectives of the Seminar

The seminar had the following primary objectives:

- **To introduce the basics of display devices:** The seminar aimed to explain the fundamental working principles of various display devices, including CRT, LCD, LED, OLED, and plasma displays.
- **To explore the materials used in display technologies:** Participants were introduced to the different materials, particularly focusing on LED phosphors, that are crucial for the functioning of modern display devices.
- **To discuss the advancements in display technologies:** The seminar aimed to highlight the recent advancements in display technology, including the development of energy-efficient and high-resolution displays.
- **To provide practical insights into the applications of display devices:** The seminar sought to demonstrate the real-world applications of display technologies in devices such as televisions, computer monitors, smartphones, and digital signage.
- **To inspire further academic research:** The seminar aimed to encourage students to pursue further studies and research in the field of display technology and materials science.

3. Summary of the Seminar

The seminar commenced with a welcome address by the Head of the Department of Physics, Dr. P. M. Vinaya Teja, who introduced the resource person, Dr. B. Walter Ratna Kumar, and the topic of the seminar. Dr. Walter began the session with a comprehensive overview of the

evolution of display devices, starting from the early cathode ray tubes (CRT) to the latest organic light-emitting diodes (OLED) technology.

He explained the working principles of various display devices in detail, including the physical and chemical properties of the materials used in these technologies. Special emphasis was placed on LED technology, particularly the role of phosphors in enhancing the efficiency and colour quality of LED displays. Dr. Walter shared insights from his research on LED phosphors, discussing their impact on the development of high-performance display systems.

The seminar also covered the technological advancements in display devices, such as the shift towards flexible and transparent displays, which have opened new possibilities for innovative applications. Dr. Walter discussed the challenges and future directions in the field, such as improving energy efficiency, resolution, and material sustainability.

Throughout the seminar, students and faculty engaged actively by asking questions and participating in discussions, which enriched the learning experience. Dr. Walter also provided practical examples of how display devices are used in everyday applications, making the session both informative and relatable.

4. Outcomes of the Seminar

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

- **Enhanced understanding of display technologies:** Participants gained a thorough understanding of the principles, materials, and advancements in display technology, which is essential for their academic and professional development.
- **Insight into LED phosphors and materials science:** The seminar provided students with specialized knowledge about LED phosphors and their critical role in modern display devices, fostering interest in materials science.
- **Awareness of industry trends:** The discussion on recent advancements and future trends in display technology helped students stay informed about the latest developments in the field.
- **Increased interest in research:** The seminar inspired students to explore research opportunities in display technologies and materials science, potentially leading to academic projects or further studies.
- **Strengthened faculty-student interaction:** The interactive nature of the seminar encouraged closer collaboration and dialogue between students and faculty, enhancing the overall academic environment.

5. Conclusion

The seminar on "Display Devices and Material" organized by the Department of Physics, Andhra Christian College, Guntur, was a highly successful and enlightening event. Dr. B. Walter Ratna Kumar delivered an engaging and informative presentation that effectively communicated the complexities of display technologies and materials. The seminar met its objectives and provided participants with valuable insights and knowledge.



Andhra Christian College, Guntur

Department of Physics

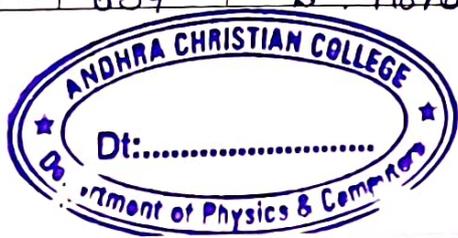
List of Students Attended for SEMINAR CLASS

TOPIC: Display Device and Material

Date: 05-12-2020

Class: IIIrd BSc

| S. No. | Class No | Name of the Students | Signature |
|--------|----------|--------------------------|--------------------------|
| 1. | 602 | M. Vajramma | M. Vajramma |
| 2. | 603 | S. Mahalakshmi | S. Mahalakshmi |
| 3. | 604 | T. Manoja | T. Manoja |
| 4. | 605 | B. Jyothi .M. | B. Jyothi M |
| 5. | 606 | Ch. Anitha. | ch. Anitha |
| 6. | 607 | D. Babu Rao | D. Babu Rao |
| 7. | 608 | J. Suneel | J. Sunell |
| 8. | 609 | U. Nagendra Ganesh kumar | U. Nagendra Ganesh kumar |
| 9. | 610 | M. Satish | M. Satish |
| 10. | 611 | K. Tulasi Ram | K. Tulasi Ram |
| 11. | 612 | ch. Love Prasanna | ch. Love Prasanna |
| 12. | 613 | K. Sudhakar | K. sudhakar |
| 13. | 614 | V. Prakash | V. Prakash |
| 14. | 615 | M. Pavan kumar | M. Pavan Kumar |
| 15. | 618 | ch. Mahesh | ch. Mahesh |
| 16. | 619 | K. Kiran kumar | K. Kiran Kumar |
| 17. | 620 | N. Venkateswarlu | N. Venkateswarlu |
| 18. | 621 | R. Ravi Kiran | R. Ravi kiran |
| 19. | 622 | B. Naga Raju | B. Naga Raju |
| 20. | 623 | U. Durga Prasad | U. Durga |
| 21. | 624 | M. Enoch | M. Enoch |
| 22. | 625 | V. Naveen | N. Naveen |
| 23. | 626 | T. Hanumantha Rao | T. Hanumantharao |
| 24. | 629 | V. Rajesh | V. Rajesh |
| 25. | 631 | K. Bhanu Prakash | K. Bhanu prakash |
| 26. | 632 | G. Maheswar Reddy | G. Maheswar Reddy |
| 27. | 634 | D. Yakobu. | D. Yakobu |
| 28. | 635 | D. Satyanarayana | D. satyanarayana |
| 29. | 637 | V. Naga Suresh | V. Naga Suresh |
| 30. | 639 | E. Mohan Krishna | E. Mohan Krishna. |



[Signature]
 HOD
 Department of Physics
 A.C. College, Guntur.