

**PITHAPUR RAJAH'S GOVT COLLEGE (A),  
KAKINADA**

(AN AUTONOMOUS COLLEGE WITH NAAC "B++" GRADE)

**DEPARTMENT  
OF  
PHYSICS & ELECTRONICS**



**Report of the activity**

**Memorandum of Understanding(MoU)**

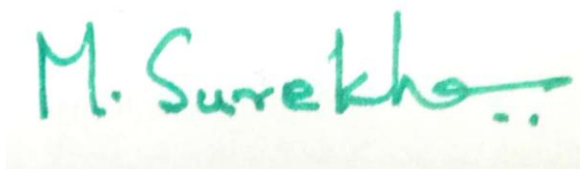

**With**

**Department of Physics,GDC(A),Rjy**

**Date:25/02/2026**

**P.R. GOVERNMENT COLLEGE (A), KAKINADA**

**DEPARTMENT OF PHYSICS & ELECTRONICS**

Date	25-02-2026
Conducted through DRC/JKC/ELF/ Dept. etc	Department of Physics & Electronics
Nature of the Activity (Seminar/Workshop/Extension lecture etc.)	Memorandum of Understanding (MoU)
Title of the Activity	Memorandum of Understanding (MoU)
Name of the Department/Committee	Physics & Electronics
Details of Resource person (Name, Designation etc.)	Department of Physics,GDC(A),Rjy
No. of Students Participated	-
Brief Report of the Activity	On 25th February 2026, the department of Physics & Electronics has taken MoU with Department of Physics, GDC(A),Rajamahendravaram. Visit to the departmental labs was also taken on the same day, to study the laboratory infrastructure, research facilities and academic practices followed by the department.
Name of the lecturers who planned and conducted the activity	Department of Physics & Electronics
Signature of the Lecturer in charge/Convener of the committee	
Signature of the Principal	 PRINCIPAL Dr.Kandula Anjaneyulu M.A.,TECHNICAL,Ph.D. PRINCIPAL (IAC)
Remarks	

# Staff meeting

119

20/02/2026

A Staff meeting is convened in our department on 20-02-2026 at 4.00pm, to discuss the following points. All the staff members are requested to attend the meeting without fail.

## Agenda:-

- ① To discuss the signing of MoU with GDC(A), Rajahmundry
- ② To plan and organize various activities for National Science day celebrations -2026
- ③ Conduct of Sem-End Practical examinations for I year students.

## Resolutions:-

① To promote the academic collaboration, it is resolved to sign the MoU with GDC(A), Rajahmundry on 25/02/26.

② As a part of National Science day celebrations, it is resolved to organize various activities as follows.

(i) Elocution - 25/02/26

(ii) Quiz - 26/02/26

(iii) poster presentation - 27/02/26

(iv) open day - 28/02/26 (FN Session)

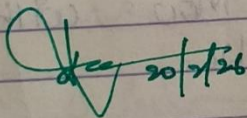
(v) Valedictory & Prize distribution - 28/02/26 (AN Session)

Duties are assigned to faculty members for effective coordination.

③ As per the academic calendar, it is discussed & resolved to conduct Semester-End Practical Examinations for I-Year students on 24/02/26 and 25/02/26.

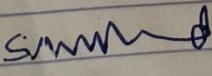
④ As the II Semester classwork is commencing from 26/02/26, it is resolved to finalize Paper allocation among faculty members & prepare time-table accordingly.

M. Surebha  
20/2/26

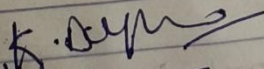
1.  20/2/26

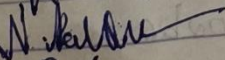
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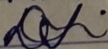
3. A. Paul

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5. P. L. D.

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8. 

## MEMORANDUM OF UNDERSTANDING (MoU)

Between

**Department of Physics & Electronics**

**P. R. GOVERNMENT COLLEGE (A), KAKINADA**

**Kakinada, Kakinada Dist., Andhra Pradesh**

&

**Department of Physics**

**GOVERNMENT COLLEGE(A)**

**Rajamahendravaram, East Godavari Dist., Andhra Pradesh**

This Memorandum of Understanding (MoU) is entered on the 24th day of February, in the year of 2026, between **Department of Physics and Electronics P. R. Government College (A), Kakinada, Andhra Pradesh** and **Department of Physics Government College (A), Rajamahendravaram, East Godavari Dist., Andhra Pradesh**. The MoU paves way for the teaching, research and academic activities that leads to a form of interaction between teachers, researchers and students in the field of research and academic activities. This arrangement is made with mutual understanding of both parties stating that **Department of Physics and Electronics P. R. Government College (A), Kakinada, Andhra Pradesh** and **Department of Physics Government College (A), Rajamahendravaram, East Godavari Dist., Andhra Pradesh** will offer teaching, research and academic activities.

### **1. Objectives of the MoU**

- a. Share research ideas in the fields of Physical Sciences and Electronics.
- b. To provide platform to teachers, researchers and students by organizing Workshops, Seminars, Conferences, Symposia and etc.
- c. To cooperate and share of resources for the benefit of both institutions.

### **2. Areas of Collaboration**

- a. Organizing Student/Research oriented hands-on sessions.

- b. Arranging guest lecturers/invited talks by the members of both institutions.
- c. Planning collaborative minor and major research projects.
- d. Setting up incubation centers.


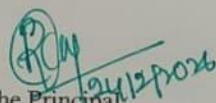
**3. Duration of MOU**

The MOU will come into immediate effect from the date specified in para one (1) and will last for 5 years in mutual satisfaction with each other.

**4. Signed in Duplicate**

The MOU is executed in duplicate with each copy being an official and legally valued document. This is signed by the both Principals of **P. R. Government College (A), Kakinada, Andhra Pradesh and Government College (A), Rajamahendravaram, East Godavari Dist., Andhra Pradesh**

On the behalf of

<p>P. R. Government College (A), Kakinada district, A.P.</p> <p>Signed by:</p>  <p><b>PRINCIPAL (FAC)</b> The Principal, <b>P.R. Govt. College (A)</b> Kakinada Kakinada District, A.P.</p>	<p>Government College (A), Rajamahendravaram, East Godavari Dist.,</p> <p>Signed by:</p>  <p>The Principal, Government College (A), Rajamahendravaram East Godavari Dist.,A.P.</p>
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M. Surekha..





## PITHAPUR RAJAH'S GOVERNMENT COLLEGE(A), KAKINADA

### Report on Visit to Government College (A), Rajamahendravaram

By the Members of Department of Physics & Electronics on 25.02.26

#### 1. Introduction

As per the directions of the Principal, Pithapur Rajah's Government College (A), Kakinada, a visit was made on 25.02.26 to the Physics Department of Government College (A), Rajamahendravaram to explore possibilities for academic collaboration and exchange of facilities through a Memorandum of Understanding (MoU).

The visit was undertaken by Dr. M. Surekha and Dr. K. Jayadev, faculty members of the Physics Department, to study the laboratory infrastructure, research facilities, and academic practices followed by the department.



## 2. Purpose of the Visit

The objectives of the visit were:

1. To establish academic collaboration between the two Physics Departments.
2. To exchange a Memorandum of Understanding (MoU) for mutual academic development.
3. To observe the laboratory infrastructure and research facilities available at Government College (A), Rajamahendravaram.
4. To identify areas where our department can strengthen its research and laboratory facilities.
5. To explore opportunities for student exchange, faculty interaction, and joint research activities.



## 3. Visit Details

During the visit, Dr. M. Surekha and Dr. K. Jayadev interacted with the faculty of the Physics Department and exchanged the Memorandum of Understanding (MoU) between the two institutions.

Both departments mutually agreed to promote collaboration in the following areas:

- Research collaboration
- Sharing of laboratory facilities
- Student exchange programmes
- Academic interaction and seminars
- Joint organization of workshops and conferences

#### 4. Laboratory Observations

During the visit, the following laboratories were observed:

- Research Laboratory
- Antique Laboratory
- General Physics Laboratory
- Electronics Laboratory
- Optics Laboratory



#### Postgraduate Physics Laboratory

It was observed that most of the regular teaching laboratories are similar to the facilities available in our college.

However, the Research Laboratory and Antique Laboratory were found to be unique and useful for enhancing research exposure and scientific heritage awareness among students.

## 5. Need for Development in Our Department

### 5.1 Establishment of a Research Laboratory

It is proposed to renovate and strengthen the existing research lab in our department by installing advanced experimental setups and research instruments.

Some essential research equipment required include:

- Hall Effect Experimental Setup
- Four Probe Resistivity Apparatus
- Thin Film Deposition Unit
- Spectrometer with Diffraction Grating
- Digital Storage Oscilloscope
- Solar Cell Characterization Setup
- Semiconductor Band Gap Apparatus
- Dielectric Constant Measurement Setup

Such facilities will promote student research projects, postgraduate experiments, and minor research activities.



## 5.2 Establishment of an Antique Physics Laboratory

An Antique Physics Laboratory can be established by utilizing the old scientific apparatus available in the department store room.

This laboratory will serve as:

- A scientific heritage display
- A demonstration lab for classical physics experiments
- A museum-like learning space for students

Possible antique apparatus to display:

- Old Spectrometers
- Galvanometers
- Tangent Galvanometer
- Cathode Ray Tubes
- Optical Benches
- Mechanical Oscillators
- Early Electrical Measuring Instruments

This will help students understand the historical development of experimental physics.





## **Key Points to Include in the MoU :**

The MoU between the two departments may include the following provisions:

### 1. Academic Collaboration

Both institutions will collaborate in academic and research activities.

### 2. Student Exchange Programs

Students may visit the partner institution for laboratory exposure and academic interaction.

### 3. Faculty Exchange

Faculty members may deliver guest lectures, seminars, or workshops.

### 4. Sharing of Laboratory Facilities

Specialized laboratory equipment may be shared for research and project work.

### 5. Joint Research Projects

Faculty from both institutions may collaborate on research publications and projects.

### 6. Organization of Academic Events

Both departments may jointly organize seminars, conferences, and workshops.

### 7. Internship Opportunities

Students may undertake internships or project work at the partner institution.

### 8. Resource Sharing

Exchange of academic resources such as books, research articles, and laboratory manuals.

Outcomes of the Visit.

The visit resulted in:

- Establishment of academic collaboration through MoU.
- Identification of the need to upgrade research facilities in our department.
- Proposal to establish an Antique Physics Laboratory using old apparatus.
- Strengthening of academic relationships between the two institutions.

## **Suggestions and Possibilities for Establishing Research and Antique Physics Laboratories**

### 1. Establishment of a Physics Research Laboratory

#### 1.1 Renovation of Existing Space

The first step is to renovate an existing room in the Physics Department to function as a Research Laboratory.

Suggested improvements:

- Proper electrical wiring and power supply
- Work benches for experimental setups
- Safety equipment and grounding systems
- Storage racks for instruments
- Computer system for data analysis
- This can be done with minimal departmental funds initially.
- 2. Procurement of Basic Research Equipment
- The research laboratory can start with moderate-cost experimental setups useful for both PG experiments and research projects like
- Condensed Matter / Materials Physics
- Hall Effect Apparatus
- Four Probe Resistivity Setup
- Band Gap Measurement Setup
- Dielectric Constant Measurement Kit
- Thermoelectric Power Setup
- Optics and Photonics
- Laser Diffraction Kit
- Optical Fiber Communication Trainer
- Michelson Interferometer
- Polarimeter
- Electronics and Semiconductor Physics
- Digital Storage Oscilloscope
- Function Generator
- Semiconductor Characterization Kit
- Microcontroller Training Kit

These setups can support student projects, PG experiments, and minor research work.

### 3. Funding Possibilities

#### 3.1 Government Funding Agencies

Funds may be obtained from the following agencies:

UGC Minor Research Projects

Department of Science and Technology (DST)

SERB (Science and Engineering Research Board)

Andhra Pradesh State Council of Higher Education (APSCHE)

These agencies often support equipment purchase and research infrastructure.

### 3.2 RUSA Grants

Under RUSA (Rashtriya Uchcharat Shiksha Abhiyan), funds are often allocated for:

Laboratory development

Research equipment

Infrastructure improvement

A proposal can be submitted through the college administration.



### 3.3 College Development Funds

Some equipment can be purchased through:

College development funds

Departmental budget

CSR funding from industries

Nearby industries in Kakinada region may support laboratory development under Corporate Social Responsibility (CSR) initiatives.

#### 4. Collaboration Through MoU

The MoU signed with Government College (A), Rajamahendravaram can be utilized to strengthen research activities.

- Possible collaborative activities:
- Sharing specialized research equipment
- Joint student projects
- Faculty research collaboration
- Joint workshops and training programs
- Exchange of laboratory manuals and experimental procedures
- This will reduce the financial burden of purchasing all equipment independently.

#### 5. Establishment of an Antique Physics Laboratory

An Antique Physics Laboratory (Physics Heritage Lab) can be created at very low cost.

##### 5.1 Utilization of Old Apparatus

Many old experimental instruments stored in the department can be restored and displayed.



Examples:

- Spectrometer
- Tangent Galvanometer
- Cathode Ray Tube Apparatus
- Optical Bench
- Old Electrometers
- Early Electrical Measuring Instruments

These instruments represent the historical development of physics experiments.

## 5.2 Development as a Physics Museum

The Antique Lab can function as a Physics Heritage Museum with:

Display racks

Information boards explaining each apparatus

Historical notes on famous experiments

Photographs of famous physicists

This will help students understand the evolution of...the evolution of scientific instruments.



## 6. Student Participation

Students can actively participate in the development of these laboratories.

Possible activities:

- Mini research projects
- Instrument maintenance
- Documentation of antique apparatus
- Preparation of experiment manuals
- Demonstration of classical experiments

This promotes experiential learning and research interest among students.

## 7. Academic Activities in the Research Lab

Once established, the research lab can be used for:

- PG research projects
- Minor research projects for faculty
- Summer research internships
- Workshops on experimental techniques
- Training programs for advanced physics experiments

## 8. Benefits to the Institution

Establishing these laboratories will provide several benefits:

- Strengthening research culture in the department
- Improving NAAC accreditation scores
- Enhancing student research skills
- Attracting research funding and collaborations
- Preserving the scientific heritage of physics experiments

## 9. Long-Term Vision

In the long term, the department can aim to develop:

- Centre for Applied Physics Research
- Materials Science Research Facility
- Laser and Photonics Laboratory
- Renewable Energy Research Laboratory

This will gradually transform the department into a research-oriented academic centre

## **10. Conclusion**

The visit to the Physics Department of Government College (A), Rajamahendravaram was highly productive. The interaction helped in understanding the infrastructure and research facilities available there and provided valuable insights for improving our departmental facilities.

The proposed research laboratory renovation and establishment of an antique physics laboratory will significantly enhance the academic and research environment of the Physics Department at Pithapur Rajah's Government College (A), Kakinada.

1. Dr. M. Surekha

2. Dr. K. Jayadev