



The Department of Physics & Electronics  
GC (A), Rajahmundry  
A brief Report on  
**Summer School Internship in Physics(SSIP)**  
**2024**  
**From 16<sup>th</sup> May to 31<sup>st</sup> May 2024**

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**Date** : From 16<sup>th</sup> May to 31<sup>st</sup> May 2024

**Name of the Event** : Summer School Internship in Physics (SSIP)

**Topic** : “Basic experiments in Physics for the students who completed class IX, X and XI for understanding the basic concepts of Physics.

**Name of the Resource Persons/organizer** : All Staff Members of Physics

**No of participants** : 06

### Objective

**Introduction to Fundamental Concepts:** Ensure students grasp the basic principles of physics through engaging experiments.

**Hands-On Learning Experience:** Provide opportunities for students to actively participate in experiments to deepen their understanding of physics concepts.

**Application of Theory to Practice:** Bridge the gap between theoretical knowledge and practical application by conducting experiments that illustrate real-world phenomena.

**Development of Critical Thinking Skills:** Encourage students to analyze experimental results, draw conclusions, and think critically about the underlying physics principles.

**Cultivating Curiosity and Inquiry:** Cultivate students' curiosity by encouraging them to ask questions, make hypotheses, and explore the answers through experimentation.

**Promoting Collaboration and Communication:** Encourage teamwork among students through group experiments, discussions, and presentations, enhancing their communication skills in the process.

**Demonstration of Career Opportunities:** Showcase the diverse applications of physics in various fields such as engineering, medicine, and technology to inspire students about potential career paths.

**Building Confidence in Physics:** Instill confidence in students by providing them with the knowledge and skills necessary to tackle physics problems independently and creatively.

## **Summary of the event :**

The Department of Physics and Electronics hosted a Two Week Summer School Internship in Physics (SSIP) geared towards students who have completed class IX, X, and XI. The program aimed to enhance their understanding of basic Physics concepts. The internship took place from May 16th to May 31st, 2024, from 8:50 am to 11:50 am.

### **Program Details:**

- A Flyer unveiling by the college principal Dr. Ramachandra RK on May 9th, 2024.
- Total of 8 responses received from students of classes IX (1), X (5), and XI (2).
- 5 students actively participated in the internship.
- 20 diverse experiments were selected from different Physics areas suitable for X and Inter students.
- The participants received theoretical explanations and hands-on experience in labs such as Mechanics, Optics, Electricity and Magnetism, Modern Physics, Electronics, Renewable Energy, Antique Equipment, Crystal Growth, and Nanoscience Research.
- Each student was provided with a handbook containing all the experiments to share their knowledge with peers at school or college.
- Internship certificates were awarded to all participants.

By conducting this program, the emphasis was placed on enriching students' academic knowledge and practical skills in the field of Physics.

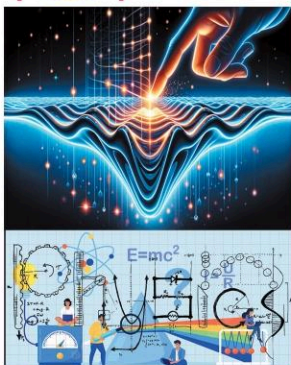


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An Autonomous Institution Since 2000: Rajahmundry, Andhra Pradesh, India



# SUMMER SCHOOL INTERNSHIP IN PHYSICS (SSIP) – 2024

(16<sup>th</sup> May 2024 to 31<sup>st</sup> May 2024)

## ABOUT THE PHYSICS DEPARTMENT :

The Department of Physics was established in 1930 under the Madras Province of British India. Post Graduate Course in PHYSICS was introduced in 1971. To inculcate Research tinge among students, and faculty, a research facility titled "Crystal Growth and Nano Science Research Centre" was established in 2009-10. At present, 04 B.Sc., Major programs, 01 M.Sc. (Physics), and Ph.D programs offered by the Department. In addition to this job oriented under graduate programs such as Renewable Energy Management and Nano Science Programs also offered. The department received the **BEST DEPARTMENT AWARD** under **GCRJY Excellence Awards 2024** from Dr. Ramachandra RK, Principal of the College.

## ABOUT THE PROGRAMME :

Department of Physics is organizing a **Summer School Internship in Physics (SSIP) - 2024** on "Basic Experiments in Physics" for the students who completed class IX, X, XI and XII for understanding the fundamental concepts of Physics.

## LEARNING OUTCOMES OF THE PROGRAMME :

**Introduction to Fundamental Concepts:** Ensure students grasp the basic principles of physics through engaging experiments, which are embedded in the CBSE, ICSE and State board curriculum. The list of practicals included in this course are :

1. Vernier Calipers
2. Screw gauge
3. Least count of Spectrometer and Travelling Microscope
4. Melde's Experiment
5. Simple Pendulum
6. Compound pendulum
7. Laser Diffraction
8. Lasers
9. Newton law of Cooling
10. AC Sonometer
11. Verification of Ohms law
12. Solar cell Characteristics
13. Carey foster- Bridge
14. To find angle of the prism
15. To find focal length of the convex lens
16. To find focal length of the Concave mirror
17. Basic logic gates
18. Basic operations of CRO wave form generation.
19. To verify the variation of magnetic field due to current carrying circular conductor.
20. Photo Cell (Planck's Constant)

**Hands-On Learning Experience:** Provide opportunities for students to actively participate in experiments to deepen their understanding of physics concepts.

**Application of Theory to Practice:** Bridge the gap between theoretical knowledge and practical application by conducting experiments that illustrate real-world phenomena.

**Promoting Collaboration and Communication:** Encourage teamwork among students through group experiments, discussions, and presentations, enhancing their communication skills in the process.

**LABORATORIES AVAILABLE:** Mechanics Lab, Optics Lab, Electricity and Magnetism Lab, Modern Physics Lab, Electronics Lab, Renewable Energy Lab, Simulation Lab, Antique Equipment Lab & Crystal growth and Nano science Research Lab

## INFORMATION REGARDING REGISTRATION :

Registration Fee Rs.2000/- (Only 50 seats available) which include Practical manual / Handouts.

**For the students who completed**

**Class IX, X, XI and XII only**

**Timings:** 8:30 AM to 11:30 AM

## Registration Link :

<https://forms.gle/wny7BAHw4qskqEp17>

## Scan QR for Registration



Principal :

**Dr. Ramachandra R.K**  
Professor in Physics  
& Raman PDF (USA)

Convener :

**Smt. Ch. Komala Lakshmi,**  
In charge, Department of Physics and Electronics

Coordinators:

**Lt. Dr. Esub Basha Shaik,** Lecturer in Physics (9705964213)  
**Smt. B. Durga Lakshmi,** Lecturer in Physics (9491419667)  
Organizing members: All the faculty members of the Physics Department

For more information about Physics department visit: <https://gcrjyonline.in/disdepartment.php?departmentid=47>

# ఈనాడు తూర్పు గాంధీదావలి

శుక్రవారం మే 10, 2024

17



## భౌతికశాస్త్ర ప్రయోగాలపై వేసవి శిక్షణ శిబిరం

దేవీచాక్, న్యూస్ టుడే: ప్రభుత్వ ఆర్ట్స్ కళాశాల భౌతికశాస్త్ర విభాగం ఆధ్వర్యంలో భౌతికశాస్త్ర ప్రయోగాలపై వేసవి శిక్షణా శిబిరం నిర్వహించనున్నట్లు ప్రిన్సిపల్ కె.రామచంద్రరావు వెల్లడించారు. గురువారం శిబిరానికి సంబంధించిన గోడపత్రికలను ఆవిష్కరించారు. 9, 10 తరగతులు, ఇంటర్మీడియట్ ప్రథమ, ద్వితీయ సంవత్సరం పూర్తిచేసిన విద్యార్థులకు ఈ నెల 16 నుంచి 31వ తేదీ వరకు ఉదయం 8.30 నుంచి 11.30 వరకు శిక్షణ తరగతులు ఉంటాయన్నారు. ఆసక్తి గలవారు సంప్రదించాలని కోరారు.

# సాక్షి

## తూర్పుగోదావరి

శుక్రవారం, 10, మే, 2024

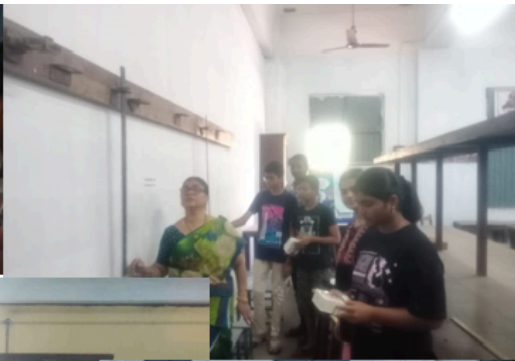
### భౌతిక శాస్త్ర ప్రయోగాలపై వేసవి శిక్షణ

కంబాలచెరువు: స్థానిక ప్రభుత్వ అటానమస్ కళాశాల భౌతిక శాస్త్ర విభాగం ఆధ్వర్యంలో భౌతిక శాస్త్ర ప్రయోగాలపై వేసవి శిక్షణ శిబిరం నిర్వహించనున్నట్లు ప్రిన్సిపాల్ డాక్టర్ రామచంద్ర ఆర్కే తెలిపారు. ఈ మేరకు గురువారం కళాశాలలో భౌతిక శాస్త్ర విభాగాధిపతి కోమల లక్ష్మి, అకడమిక్ సమన్వయకర్త డాక్టర్ సంజీవ్ కుమార్, అధ్యాపకుల సమక్షంలో పోస్టర్ను ఆవిష్కరించారు. కోమల లక్ష్మి మాట్లాడుతూ 9, 10 తరగతులు, ఇంటర్మీడియట్ మొదట, ద్వితీయ సంవత్సరం పూర్తి చేసిన విద్యార్థులకు ఉపయోగపడేలా ఈ కార్యక్రమాన్ని రూపొందించామన్నారు. ఈ నెల 16 నుంచి 31వ తేదీ వరకు ప్రతిరోజు ఉదయం 8.30 నుంచి 11:30 వరకు భౌతిక శాస్త్రంలో మౌలిక అంశాలపై అవగాహన కల్పిస్తామన్నారు. కేవలం 50 మంది



పోస్టర్ విడుదల చేస్తున్న ప్రిన్సిపాల్ డాక్టర్ రామచంద్ర, అధ్యాపకులు

విద్యార్థులకు మాత్రమే అవకాశం ఉంటుందన్నారు. కోర్సు, ఫీజు వివరాలకు కళాశాల భౌతిక శాస్త్ర వెబ్సైట్ను సందర్శించాలన్నారు. మరిన్ని వివరాలకు అధ్యాపకులు డాక్టర్ ఈసుబ్ బాషా 97059 64213, దుర్గాలక్ష్మి 94914 19667లను సంప్రదించాలన్నారు.





Sd/-  
Smt. Ch. Komala Lakshmi  
HOD of Physics & Electronics