

**SGK GOVERNMENT DEGREE COLLEGE  
VINUKONDA, PALNADU DISTRICT**

**Accredited by NAAC with “B<sup>++</sup>” Grade  
(Affiliated to Acharya Nagarjuna University)**



**GUEST LECTURE**

**DATE: 12.03.2025**

**TIME: 11.00 – 12.00 PM**

**CONDUCTED BY**

**PHYSICS DEPARTMENT**

# Activity Report

S. no.	Content	Name
1	Name of the Programme	Guest Lecture
2	Date & Time	12.10.2025 & 11.00 – 12.00 PM
3	Conducted by	Physics Department
4	No. of Students attended	23
5	Name of the topic	Fundamentals of Nuclear Physics
6	Resource Person	Sri SK. Akram, Lecturer in Physics, GDC Cumbum, Prakasam dist.
7	Chief Guest	Dr. K. Srinivasa Rao, Principal
8	Convener	Sri B. Nageswararao Lecturer in Physics

## Objectives:

- ❖ To make the students aware of the Fundamentals of Nuclear Structure.
- ❖ To understand the fundamental building blocks of the matter.
- ❖ To know about various applications of Nuclear Physics in everyday life.
- ❖ To interact with the guest faculty members and develop knowledge

## Description of the event:

The guest lecture on "Nuclear Physics" was conducted at Department of Physics SGK GDC VINUKONDA on 12.10.2025. The lecture aimed to introduce students to the fascinating world of Nuclear physics and its various applications in modern science and day to day life.

The Guest invited was Sri SK.Akram lecturer in physics Govt. Degree College Cumbum, Prakasam dist, who came up with his lecture on the topic, 'Nuclear Physics'. The program began with the welcome address by the Dr.K.V.S Koteswara Rao, Lecturer in Physics and proceeded by the presentation of the guest profile by the Dept In-charge, B.NageswaraRao and handed over the session to the guest of the day Sri SK.Akram. He presided over the lecture with his topic and explained the following things.

## Fundamentals of Nuclear Physics

- The Atomic Nucleus.
- Nuclear Forces.
- Nuclear Binding Energy.
- Radioactive Decay
- Nuclear Reactions.

## Applications of Nuclear Physics

- **Nuclear Energy:** Power plants use controlled fission reactions to generate electricity.
- **Medical Applications:** Radiation therapy, PET scans and MRI use nuclear principles.
- **Industrial & Scientific Uses:** Carbon dating, food irradiation, and space exploration

**Feedback:** Mr. B.NageswaraRao Dept In-charge, conveying the importance of the lecture to the students and extending his appraisal of the session and initiating feedback from students. Students felt excited and reflected their opinions in feedback.

- Ms. P. Raviteja from I B.Sc gave his feedback that the session was highly informative and valuable to the students.
- G. Merin Kumar, II B.Sc presented his feedback in the form of words expressing gratitude for teaching in an effective manner within a short time. He even requested for organizing such informative lectures in future.

The program ended with vote of thanks by Mr. B.NageswaraRao Dept In-charge, who displayed his gratitude in a unique way making this program a grand success

### **Outcome:**

- ❖ Students were able to understand the Fundamentals of the nuclear structure and building blocks of the matter.
- ❖ Students were able to interact with new faculty members through their lecture.
- ❖ Students were learn the Applications of Nuclear Physics.

### **PHOTOGRAPHS WITNESSING THE PROGRAM**





**Guntur, Andhra Pradesh, India**  
2prq+2w8, Vinukonda - Darsi Rd, Andhra Pradesh  
522647, India, Guntur, Andhra Pradesh 522647, India  
Lat 16.039893° Long 79.739863°  
12/03/2025 11:00 AM GMT +05:30



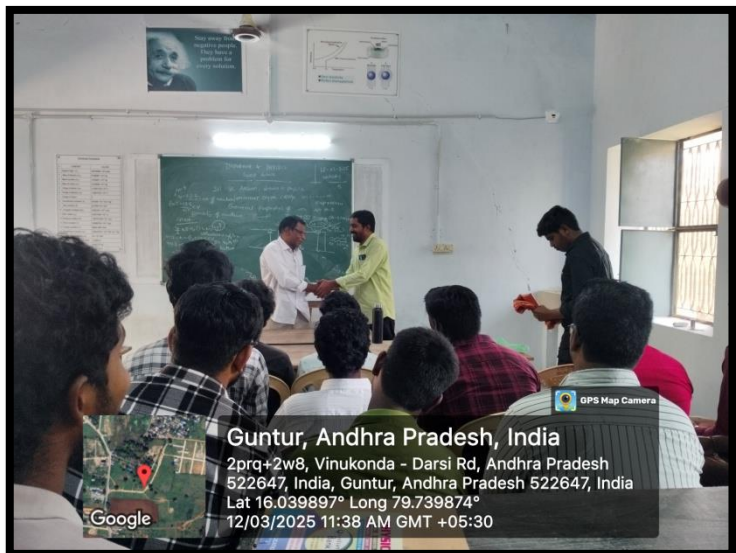
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