

S E S COLLEGE SREEKANDAPURAM

Department of Physics



ACTIVITY REPORT 2024-2025

1. Career guidance class on Physics

On July 11 2024, the Department of Physics organized a career guidance class for science students. The resource person Mr. Anoop R, (Managing director and partner -Prominent) inaugurated and delivered a lecture. Twenty-four students of science departments benefitted the same.

Objectives:

An awareness of various job opportunities was given. Introduced students to the wide range of physics-related careers—academic research, engineering, data science, renewable energy, science communication, and more—highlighting required skills and qualifications.

Outcome:

The lecture was successfully bridging the gap between theoretical knowledge and applied science. Students gained clarity on their interests, skills, and values—learning to align these traits with suitable physics-related careers. They developed critical decision-making skills by evaluating career options against personal strengths and long-term goals



SES COLLEGE SREEKANDAPURAM
DEPARTMENT OF PHYSICS

CAREER GUIDANCE

INAUGURATION : ANOOP R

ON JULY 11, 2024



10.00 AM

**"your Future Is Created By What You Do Today, Not
Tomorrow. Choose A Career That Reflects Your Passion,
Not Pressure."**





2 . Interaction with alumni- Seminar on Research Methodology

One day seminar on research methodology was conducted on 26th July 2024. Anusha T (College Physics ALUMNI and PG student, NIT Surathkal) handled the session. Sixteen students of our department are benefitted the same.

Objectives

To give awareness on various research opportunities in India and abroad. Also to discourse the strategies to implement in appearing competitive exam. Provide clarity on what research methodology is and why it's essential—a foundation for conducting valid and reliable studies

Outcome

The lecture successfully build research interest in students. Attendees improved their understanding of core concepts—research design, hypothesis formulation, qualitative vs quantitative methods, data collection, and ethical conduct.



SES COLLEGE SREEKANDAPURAM
DEPARTMENT OF PHYSICS

SEMINAR ON

RESEARCH METHODOLOGY

BY ALUMNI

INAUGURATION AND SESSION HANDLED BY

ANUSHA T

[RESEARCH FELLOW NIT SURATHKAL]

ON 26th JULY 2024

 **10.00 AM**

"Research is the journey from known to unknown –
every question you ask today, lights the path for
tomorrow's discovery."





3. Quiz Competition: Nagasaki Day Quiz

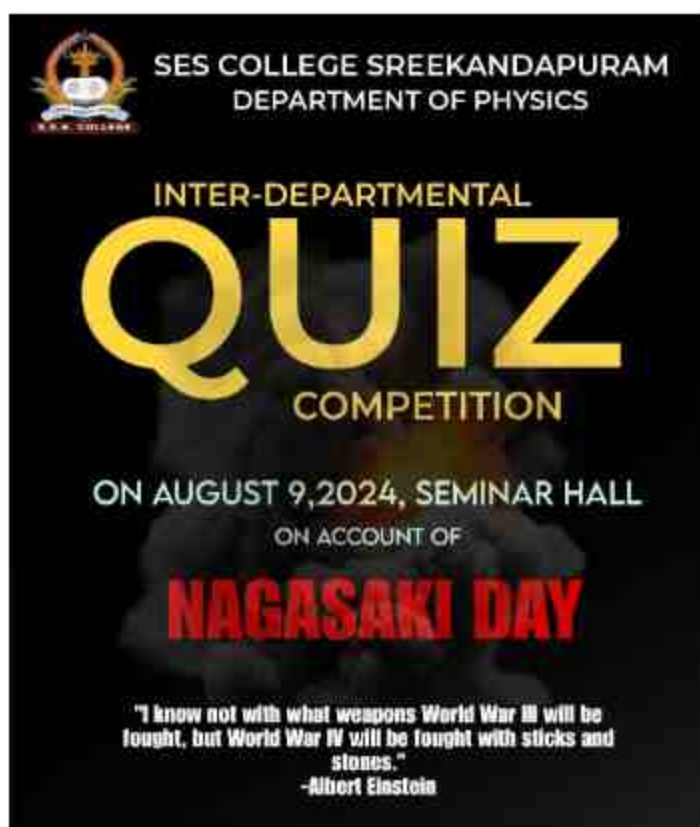
A Quiz competition on Nagasaki day was conducted on 9th August at 11.30 AM onwards. Students from various departments actively participated. Vishnu S and Rizana T of Chemistry department won First and second Prizes. Twenty students of various departments actively participated in the competition.

Objectives

To assess and enhance participants understanding of the scientific principles behind nuclear weapons, particularly the atomic bomb dropped on Nagasaki, including nuclear fission, radioactive fallout, energy release, and the technological and environmental consequences of nuclear warfare.

Outcome

Quizzes encourage learners to engage with peer-reviewed evidence, fostering nuanced conversations about how radiation dose relates to health risk, the debates around low-dose exposure thresholds, and ongoing research in radiation science



4. How to prepare for competitive Exams and all: by ALUMNI

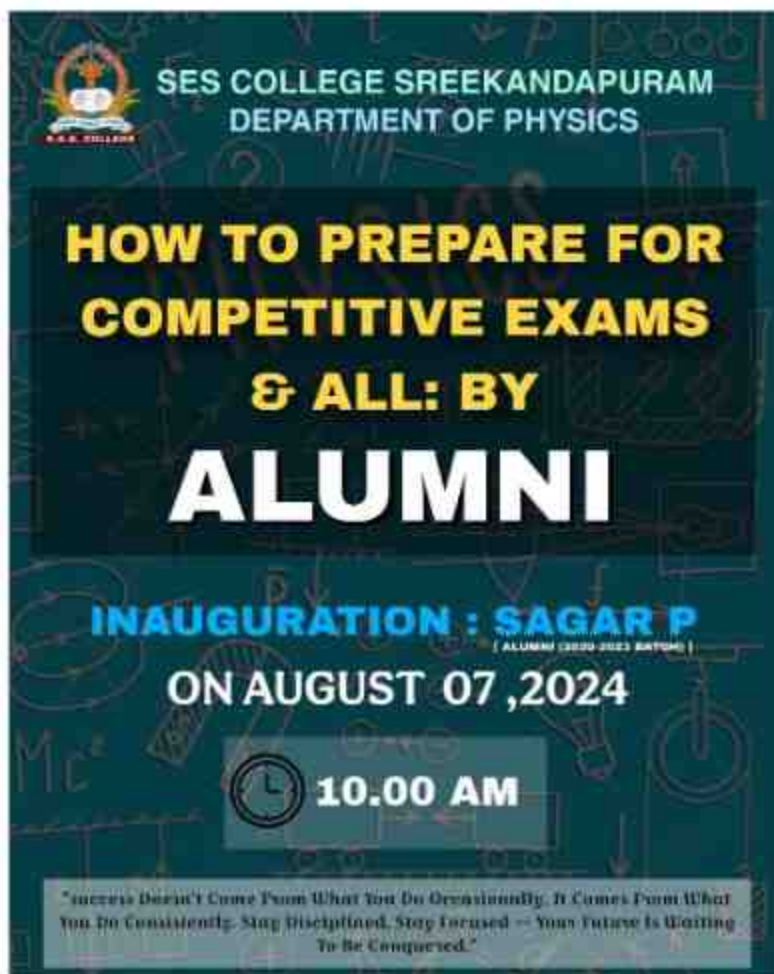
Tips to qualify various entrance exams, a coaching series was inaugurated on 07/08/2024. It was an initiation by ALUMNI of our department. Sagar P (2020-2023 Batch) inaugurated the same by handling session on the same. Final year students of our department benefitted by this session.

Objectives:

Help participants understand the specific format, syllabus, and scoring pattern of the competitive examinations, enabling them to set realistic **SMART goals** (Specific, Measurable, Achievable, Relevant, Time-bound). Demonstrate techniques like prioritizing questions, using the Pomodoro Technique, and practicing with timed mock tests to improve both preparation and exam-day pacing

Outcome

Attendees learned to build structured study schedules and prioritize tasks effectively—leading to better time allocation during both preparation and exam day. Wellness strategies (sleep, nutrition, exercise, meditation) combined with confidence-building exercises (visualization, peer support) help reduce anxiety and enhance performance



5. Power Quiz: State Level Quiz Competition by KSEB

Department of Physics in association with Officers Association - Kerala State Electricity Board conducts Power Quiz every year. It is a state level Quiz competition for School and College students. Students of various departments actively participated in the event on 26/09/2024. Majid P P of I year Chemistry won first prize.

Objectives:

Introduce students to the workings of the power industry—from generation to transmission, distribution, and renewable integration—to deepen their understanding of how electricity systems function in Kerala and beyond.

Outcome:

The competition aims to enhance awareness and knowledge about the power sector among students, fostering a deeper understanding of energy conservation, electricity generation, and related technologies.



SES COLLEGE SREEKANDAPURAM
DEPARTMENT OF PHYSICS
IN ASSOCIATION WITH
KSEB SREEKANDAPURAM

POWER QUIZ COMPETITION

ON 26TH SEPTEMBER 2024



10.00 AM

**"Without resistance, there's no control;
without questions, there's no growth."**



6. Skill development Programme

Skill development seminar was conducted on 10th December 2024. Students from various departments benefitted the same. Smt. Sreeshma Rajan P P, Assistant Professor, Department of Physics, SN college Kannur handled the session. 12 students of our department benefitted by the program.

Objectives:

Students acquire practical abilities—like using lab equipment, measuring accurately, conducting trials—which are essential for future scientific and technical work

Outcome:

Hands-on experimentation helps bridge theory and practice, deepening understanding of abstract physics concepts by seeing them in action—for example, using lab work to demonstrate laws of motion.



SES COLLEGE SREEKANDAPURAM
DEPARTMENT OF PHYSICS

SKILL DEVELOPMENT PROGRAMME

INAUGURATION AND SESSION HANDLED BY

Smt. SREESHMA RAJAN P P

(ASSOCIATE PROFESSOR DEPARTMENT OF PHYSICS, SN COLLEGE KANNUR)

ON 10th DECEMBER 2024



10.00 AM

"skill is the bridge between dreams and success. develop it, sharpen it, and let it shape your future."



7. APT Examination for BSc Physics students

The Physics Talent Search Examination (*APT-TSE*) is an academic initiative designed to identify and nurture talented students with a strong interest in physics. The examination serves as a platform to encourage analytical thinking and conceptual understanding among students.

Objective

TSE examination is aimed to recognize and reward meritorious students in the field of physics and thus to assess and promote physics aptitude among students

Outcome:

Students will demonstrate a solid understanding of core physics principles in areas such as mechanics, electromagnetism, thermodynamics, optics, and modern physics. Students will show proficiency in quantitative reasoning, including mathematical modeling and numerical analysis in physics problems.





SES COLLEGE SREEKANDAPURAM DEPARTMENT OF PHYSICS

ALL KERALA PHYSICS
TALENT SEARCH EXAMINATION
APT TSE 2024-25



(Professional Organization of University
and College Physics Teachers in Kerala)
Reg No: KTM 1051/99

18 - 10 - 2024 Friday (Part A)

Time: 2:30 p.m. to 3:30 p.m.

&

23 - 10 - 2024 Wednesday (Part B)

Time: 2:30 p.m. to 3:30 p.m.

State Co-ordinator
Dr. REENA MARY A P
Govt Victoria College Palakkad

9495840114

reemaryap@gvt.ac.in

1st Prize

ECG SUDARSAN GOLD MEDAL &
PHYSICS BOOKS WORTH ₹ 3000/-

2nd Prize

PHYSICS BOOKS WORTH ₹ 3000/-

3rd Prize

PHYSICS BOOKS WORTH ₹ 2000/-

REGISTRATION

Contact the centre co-ordinator. Registration Fee: Rs. 70/-

ELIGIBILITY

Any student of Kerala studying B.Sc. Physics or first three
years of Integrated M.Sc. Physics

STRUCTURE OF TSE

- The online examination consists of two parts:
Part A: 20 Multiple Choice questions (Duration 1 hour)
Part B: 10 Descriptive questions (Duration 1 hour)
- No negative marks for wrong answers
- Credit will be given for correct steps and formulae for questions in Part B
- 10 % or the first 100 (whichever is less) among the toppers in Part A will
be selected for attending the descriptive test in Part B
- The toppers of the written examination will be called for an interview.
Final rank will be published based on the performance in the interview

OFFICE BEARERS

President	Dr. Shilpa Jones, Catholicate College, Pathanamthitta
Vice President	Dr. Asha A.S., CUSAT
Secretary	Dr. Nubia P. Abraham, St. Thomas College Thiruvalla
Joint Secretary	Dr. Santhoshan V., CUSAT
Treasurer	Dr. Reshmi R., VIC College, Aluva



8. Women Empowerment Programme

In order to encourage and motivate girl students, women empowerment seminar was conducted by the department on 07th January 2025. The session was handled by Smt. Sheela M Josesh (Rtd. HOD Department of Physics, SES College Sreekandapuram). Around twenty-two students motivated.

Objective

To create awareness about gender rights and promote equality in social, economic, educational, and political spheres. To provide women with access to education, vocational training, and life skills that enhance employability and self-sufficiency.

Outcome:

More women and girls gain access to formal and non-formal education, leading to higher literacy rates and academic achievements. Women develop skills that lead to employment, entrepreneurship, or income-generating activities, resulting in improved financial independence.



S.E.S COLLEGE SREEKANDAPURAM
(AFFILIATED TO KANNUR UNIVERSITY)
DEPARTMENT OF PHYSICS

WOMEN EMPOWERMENT PROGRAMME

LINGUISTIC EQUALITY AMONG STUDENTS

TIME

07/01/2025

12:30pm

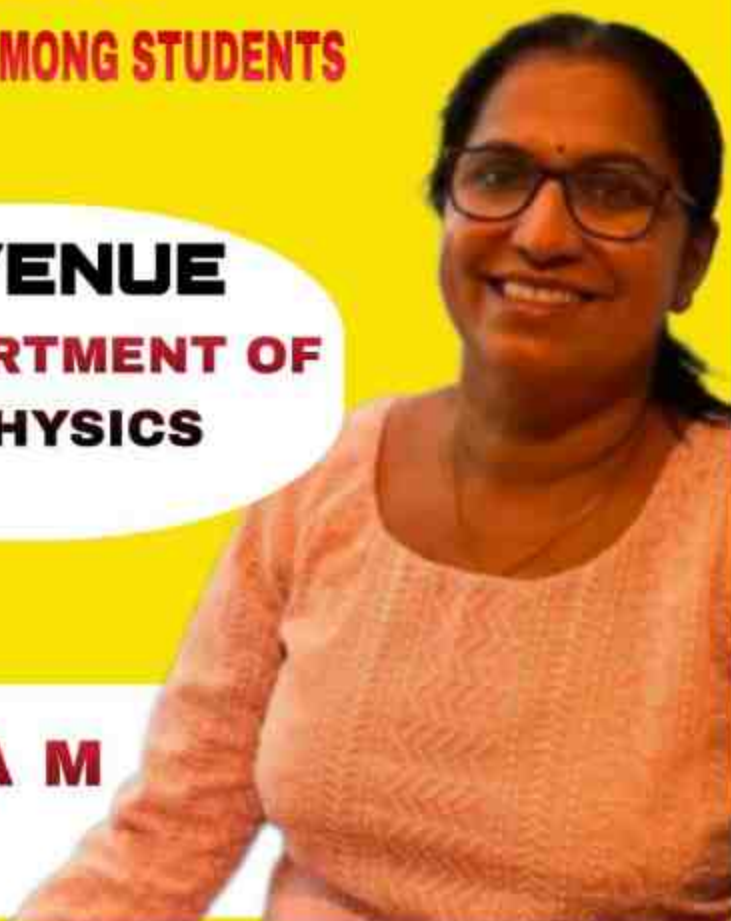
to

02:00pm

VENUE

**DEPARTMENT OF
PHYSICS**

**Smt. SHEELA M
JOSEPH**



**ORGANIZED BY DEPARTMENT OF PHYSICS,
SES COLLEGE SREEKANDAPURAM**



9. Extension 1: Elevate 2025

The Department of Physics successfully organized a Science Career Expo on April 16, 2025, aimed at enlightening students about the vast career prospects available in science disciplines.

A key highlight of the event was an insightful talk delivered by Mr. Nabeel Muhammed A R, who spoke on the topic: "Exploring Diverse Opportunities in Science Degree Programs – In India and Abroad."

During his session, Mr. Nabeel provided students with a clear overview of:

- Various undergraduate and postgraduate science programs.
- Research and scholarship opportunities in top global institutions.
- Career paths in academia, research, industry, and public sectors.
- Entrance exams, fellowships, and international admissions procedures.
- Importance of interdisciplinary skills, internships, and scientific networking.



SES COLLEGE SREEKANDAPURAM
DEPARTMENT OF PHYSICS

ELEVATE 2025

WHERE SCIENCE
MEETS YOUR FUTURE

"Explores the diverse opportunities available in
Science Degree Programs both in India and
abroad."

"Explore the Possibilities,
Build Your Future"



April 16,
2025



SES College
Sreekandapuram



10.00 AM-
1.00 PM



10. Industrial Visit to Goa Planetarium

Students of Physics department visited Goa Planetarium on 11th January 2025.
Around 10 Students also visited various manufacturing units



11. Birthday Book

The Birthday Book Program is an initiative aimed at promoting reading habits among students and enriching library collections. It encourages students of outgoing batch to celebrate their birthdays by donating books to the department library. All the students of 2021-24 Physics batch contributed for donating book.

Objective

To develop a sense of social responsibility and generosity among students and thus strengthen library resources through community involvement.

Outcome

The Birthday Book Donation Program had a positive and meaningful impact on student community. A steady increase in the number and variety of books available in the department library.

