

# DEPARTMENT OF PHYSICS

Activities in a glance (2024-25)

# TABLE OF CONTENTS

Sl No	Activity	Page No
1	<b>Meet the Scientist</b>	<b>2-3</b>
2	<b>Session on World Suicide Prevention Day</b>	<b>4-5</b>
3	<b>Honouring Sebin Antu</b>	<b>6-7</b>
4	<b>Inner Balance- A Journey to Self</b>	<b>8-9</b>
5	<b>Women Self Defence</b>	<b>10-11</b>
6	<b>Mangrove Plantation Drive - Green Belt for Wetlands</b>	<b>12-13</b>
7	<b>Recent Trends in Nanoscience</b>	<b>14-15</b>
8	<b>Multidisciplinary Research and Innovations in Applied Physics</b>	<b>16-17</b>
9	<b>Physics Alumni Lectures 2025</b>	<b>18-19</b>
10	<b>Sky Watch programme</b>	<b>20-21</b>

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## Meet the Scientist

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The programme started with a welcome speech by Ms. Smeehan S Shameem, Treasurer of Physics Club. Dr. Poornima N, Head of the Department introduced the speaker, Mr. Shiju G Thomas, Division Head, SSMD, VSSC (ISRO), Thiruvananthapuram. The speaker inaugurated the Physics Club activities for the academic year 2024-25 and led a session which catered to all categories of learners. Mr. Shiju spoke in depth about the preparatory phase of Chandrayaan mission and of lunar missions that are being planned in the future. There was an interaction session following which the chief guest distributed the certificates for students who completed short term courses jointly conducted by IIRS & ISRO. On behalf of IQAC, Dr. Priyesh K V collected the certificate for the institution. Mr. Ramakanth V Prabhu, a final year B.Sc. Maths student, gave feedback on the session. The meeting ended with a Vote of Thanks by Mr. Arjun O B, Secretary of Physics Club.



**ST PAUL'S COLLEGE, KALAMASSERY**  
HMT COLONY P.O., KALAMASSERY, KOCHI - 683503  
AFFILIATED TO MAHATMA GANDHI UNIVERSITY KOTTAYAM

50 Years of Life, Study, Live  
St. Paul's College  
Kalamassery, Kochi

# MEET THE SCIENTIST

ORGANISED BY DEPT. OF PHYSICS



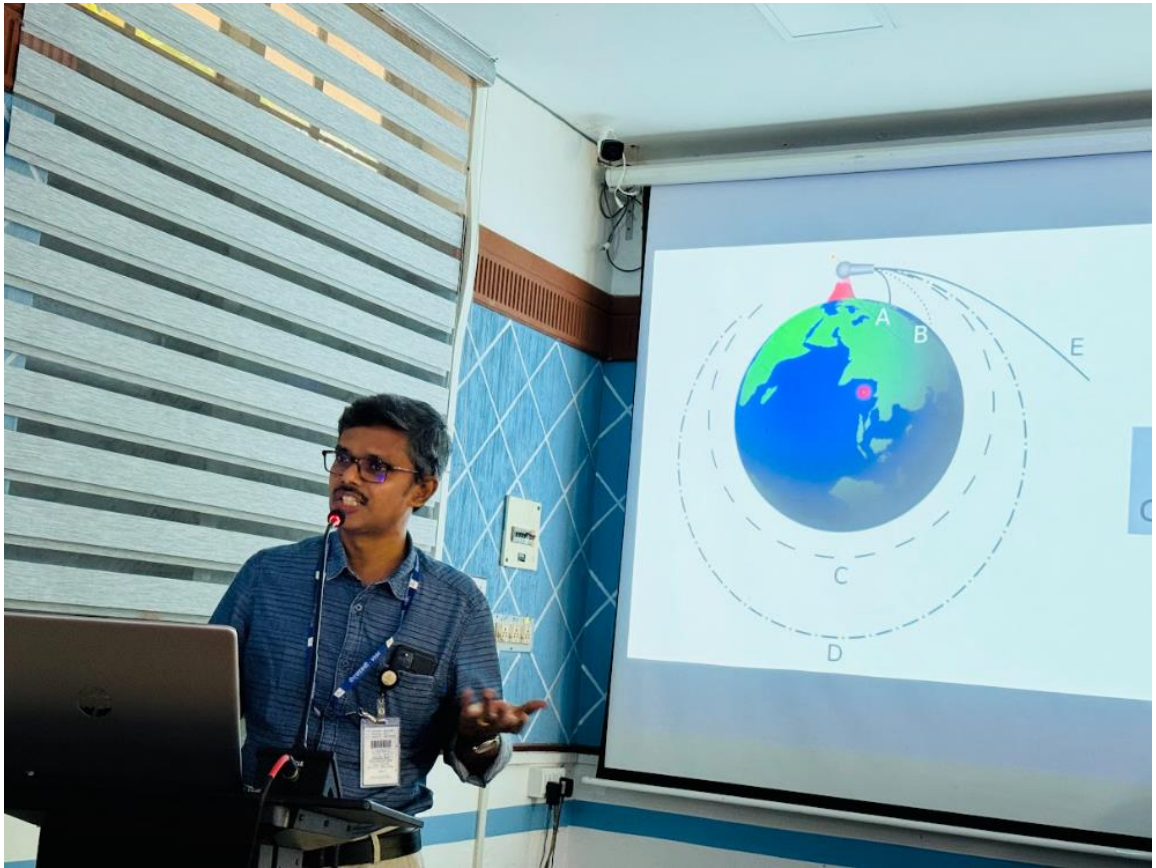
**MR. SHIJU G THOMAS**  
DH, SSMD/ASMG  
VSSC, ISRO  
THIRUVANANTHAPURAM

## PHYSICS CLUB INAUGURATION & TALK

TOPIC -  
"INDIA'S LUST FOR  
MOON  
CHANDRAYAAN-3 AND  
BEYOND"

DATE: 12-08-2024 MONDAY  
TIME: 9.00 A.M.  
VENUE: BACCINELLI HALL

FACULTY COORDINATOR - DR. POORNIMA N  
STUDENT COORDINATOR - SREERAJ M R  
physics@stpauls.ac.in



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*Session on world suicide prevention day*

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The Department of Physics in association with the counseling cell and the Jeevani Centre for Wellbeing organized a session on 'Changing the narrative on suicide', in observance of World suicide prevention day on the 6<sup>th</sup> of September 2024. The session commenced at 12.30 pm with a welcome speech by the faculty coordinator of Jeevani. The session was conducted by Fathima Shirin, Psychologist, Jeevani Centre for Wellbeing, Department of Collegiate Education, Government of Kerala. 47 participants attended the program.

The session focused on risk factors, warning signs, and community-level prevention of suicide. The program concluded at 1.30 pm.

The poster features a light blue background with decorative wavy borders. At the top left is the logo of St. Paul's College, Kalamassery, with the motto 'NOBLY LIVED' and 'Esttd. 1965'. The main text is centered, starting with 'Department of Physies' in purple, followed by 'In association with Counseling Cell' in blue. Below this is the Jeevani logo, a green and blue figure with the text 'Jeevani CENTRE FOR WELL-BEING'. A speech bubble on the left contains the quote 'Start the Conversation'. The main title 'Changing the narrative on SUICIDE' is in large, bold letters, with 'SUICIDE' in orange. Below it, 'In observance of World Suicide Prevention Day' is written in blue, accompanied by a yellow ribbon icon and the date 'September 10'. A box on the left provides the date, venue, and time. A circular portrait of Fathima Shirin is on the right, with her name and title. At the bottom, the names of the student coordinators, faculty coordinator, and principal are listed.

**St. Paul's College, Kalamassery**  
Affiliated to Mahatma Gandhi University

**Department of Physies**  
In association with  
**Counseling Cell**

&  
**Jeevani**  
CENTRE FOR WELL-BEING

Organizes a session on  
**Changing the narrative on SUICIDE**

In observance of  
**World Suicide Prevention Day**  
September 10

"Start the Conversation"

Date : 06/09/2024  
Venue : Room S16  
Time : 12. 30 PM

<https://meet.google.com/srb-oovb-jho>

**Resource Person:**  
**Fathima Shirin**  
**Psychologist**  
Jeevani centre for wellbeing,  
Department of  
Collegiate Education,  
Government of Kerala

Student Coordinators :  
Eunice A & Ebin Varghese

Faculty Coordinator :  
Jixy Joseph

Principal :  
Prof. Dr. Pramada Ramachandran



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## *Honouring Sebin Antu*

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The felicitation program commenced at 2:00 pm with a prayer. The stage was graced by the presence of the following dignitaries: Guest Sebin & his mother, Principal Pramada Ma'am, Assistant Manager Fr. Raphael Kalluveetil, HOD Poornima Ma'am, Program Coordinator Jixy Ma'am.

Sebin, a differently abled alumnus, recently employed at Study World College of Engineering, Coimbatore, shared fond memories of his time at St. Paul's College. Sebin expressed gratitude to his class guide and other faculty members, acknowledging their significant role in his success. His Mother shared insights into his upbringing, struggles, and triumphs, emphasising the importance of family support and inclusive education. Notably, she discussed her tireless efforts in litigation, securing landmark victories for differently abled individuals in court, inspired by Jixy Ma'am's advice to file a case. The program concluded at 3:30 pm with a heartfelt gesture, as the staff and teachers presented Sebin Antu with a token of appreciation.

**ST. PAUL'S COLLEGE, KALAMASSERY**  
Affiliated to Mahatma Gandhi University, Kottayam

**HONOURING**

**Mr. Sebin Antu**  
**B.Sc. Physics 2019-'22 batch**

**DATE: 04-10-2024**      **2.00 P.M.- 3.30 P.M.**

**VENUE: BACCINELLI HALL**

*Organized by*  
*The Staff & Students, Department of Physics*



Ernakulam, Kerala, India  
382H+XF5, HMT Colony, P.O, Kalamassery, Ernakulam, Kochi, Kerala 683503, India  
Lat 10.052369°  
Long 76.32847°  
04/10/24 02:07 PM GMT +05:30

Google

GPS Map Camera



Ernakulam, Kerala, India  
382H+XF5, HMT Colony, P.O, Kalamassery, Ernakulam, Kochi, Kerala 683503, India  
Lat 10.052378°  
Long 76.328473°  
04/10/24 02:32 PM GMT +05:30

Google

GPS Map Camera

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*'Inner Balance- A Journey to Self '*

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The Department of Physics organized a session on “**Inner Balance- A journey to self**” on the 14th of October 2024. The session commenced at 12 pm with a welcoming silent prayer. Dr. Poornima N, the Head of the Department, delivered the welcome speech. The session was conducted by **Dr Ancy Ilyas**, Chief consultant and Mind Healer, International Mind Coach, Smart India Foundation and Mahdi Healing Clinic. 51 student participants and 6 teachers attended the program.

The awareness class, titled “Inner Balance –A Journey to Self “aimed to educate the participants on the importance of maintaining inner peace and achieving personal balance in today’s fast-paced world. The session was designed to enable individuals to lead a more harmonious and peaceful life. The class comprised a brief description and significance of inner peace, identifying the factors which disrupt inner peace and the connection between mental, emotional and physical well-being. Followed by the introduction was a guided meditation and a few breathing techniques. These interactive components were very impactful to the participants. The session emphasized the importance of goals in every individual’s life.

**ST PAUL'S COLLEGE, KALAMASSERY**  
AFFILIATED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM

**MENTORING AND COUNSELING CELL & DEPARTMENT OF PHYSICS**  
In association with  
**SMART INDIA FOUNDATION & MAHDI HEALING CLINIC**

*Awareness class*  
**INNER BALANCE**  
*A JOURNEY TO SELF*

**Speaker**  
**DR. ANCY ILYAS** BAMS, DAsc  
MAHDI HEALING CLINIC, KOCHI  
CHIEF CONSULTANT & MIND HEALER  
INTERNATIONAL MIND COACH

**Date & Time**  
**14th October, 2024**  
**12.00 PM**  
**Venue**  
**Baccinelli Hall**

**Faculty Coordinator : Jixy Joseph**      **Student coordinator : Meenu V J**



GPS Map Camera

Ernakulam, Kerala, India  
382H+XF5, HMT Colony, P.O, Kalamassery, Ernakulam, Kochi, Kerala 683503, India  
Lat 10.052362°  
Long 76.328459°  
14/10/24 12:36 PM GMT +05:30

Google



GPS Map Camera

Ernakulam, Kerala, India  
382H+XF5, HMT Colony, P.O, Kalamassery, Ernakulam, Kochi, Kerala 683503, India  
Lat 10.052367°  
Long 76.328459°  
14/10/24 01:28 PM GMT +05:30

Google

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## Women Self Defence

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The Women Empowerment Cell and Department of Physics jointly organized a session on 'Women Self Defence' in association with 24 Connect. The Asst. News Editor of Twenty Four, Ms. Smitha V H was the chief guest and she inaugurated the session with a few words on the necessity of such sessions in the present day scenario. The Principal Prof. Dr. Pramada Ramachandran also spoke on the occasion. The training session was handled by Renshi Unnikrishnan and his disciples. The session was quite interesting and informative for the students.

**24 CONNECT**

**WOMEN  
SELF  
DEFENCE**

**October  
15<sup>th</sup>  
Tuesday**

**11.45 am to 1.30 pm**

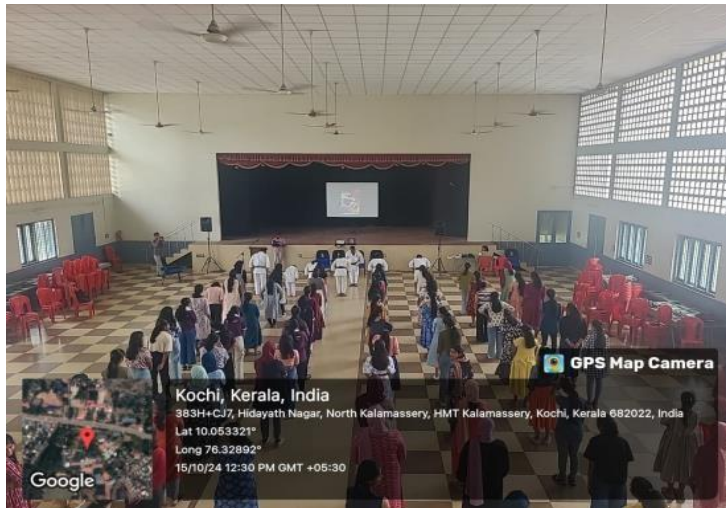
**St. Paul's College, Kalamassery**

Aiki school of martial arts  
Shotokan karate Do. Vypin Dojo

**Instructor  
Renshi: Unnikrishnan**

**Special Guest : Smitha V H**  
(Asst. News Editor - Twentyfour)

twentyfour news | 24onlive



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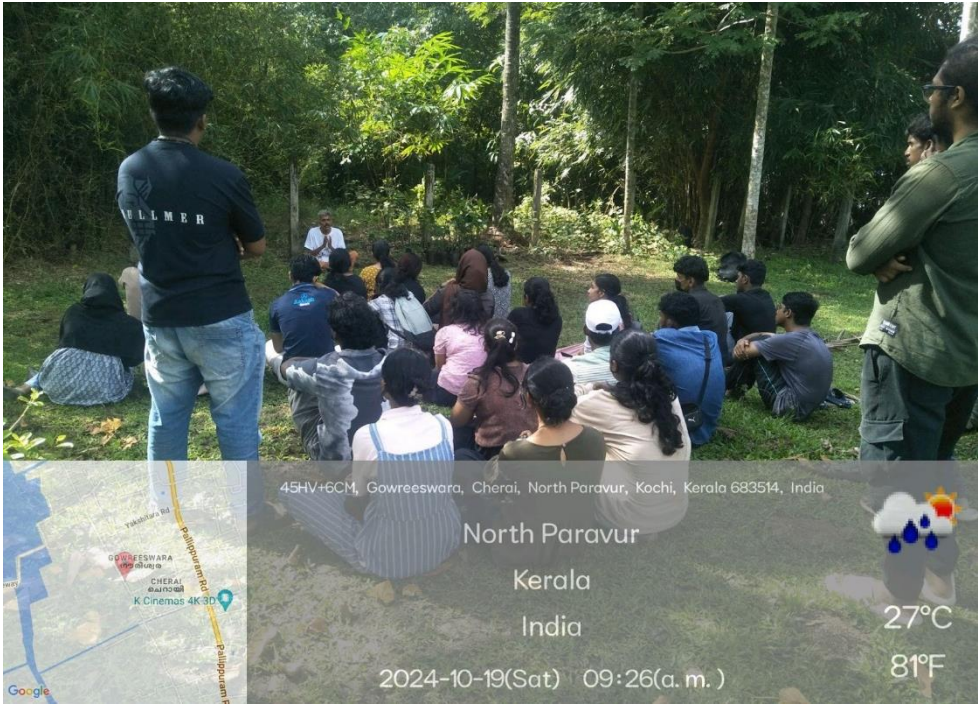
*Mangrove Plantation Drive - Green Belt for Wetlands*

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The Nature Club and Department of Physics, St. Paul's College, Kalamassery, in association with Grassroute Movement for sustainable survival, organized a wetland restoration social outreach activity by a mangrove plantation drive at Ayyampilly on 19th October 2025. Nature club members and students of the Physics department participated in the activity. 30 mangrove saplings were planted on the wetlands of Ayyampilly. Shri. I B Manoj, an Environmentalist, delivered a talk on the importance of wetland restoration and conservation.



The poster features a light blue background with a black border. At the top left is a circular logo with 'SP' and 'NCL' and the text 'WORLDLY LIVED' and 'Estd. 1965'. At the top right is a logo for 'St. Paul's College' with '50 Years of Education' and '1965-2015'. The main title 'MANGROVE PLANTATION DRIVE' is in large green letters, followed by 'GREEN BELT FOR WETLANDS' in slightly smaller green letters. Below this, in blue text, is 'SOCIAL EXTENSION BY DEPARTMENT OF PHYSICS AND NATURE CLUB ST. PAUL'S COLLEGE, KALAMASSERY'. A central photograph shows a mangrove forest with dense green foliage and exposed roots along a body of water. At the bottom, a teal banner contains the text 'OCTOBER 19, 2024 | AT 8:00 AM' in white, with 'AYYAMPILLY' in green below it. At the bottom left is a small tree icon, and at the bottom right is the text 'IN ASSOCIATION WITH GRASSROUTE MOVEMENT FOR SUSTAINABLE SURVIVAL' in blue.



## Recent Trends in Nanoscience

The conference is aimed at providing a platform for researchers and scientists to assess recent trends and developments in Nanoscience for promising applications. The sessions will cover emerging experimental and theoretical research in nanoscale electronics and optoelectronics. The seminar would not only provide valuable insights into the current landscape of nanoscience but also foster collaboration and discussion among researchers, students, and industry professionals. The seminar provided opportunities for students, research scholars and teachers for understanding the global research trend in material science especially in the field of nanoscience.



**ST. PAUL'S COLLEGE,  
KALAMASSERY**



INTERNATIONAL SEMINAR ON  
**RECENT TRENDS IN  
NANOSCIENCE**  
07-08 NOVEMBER 2024  
organised by  
**DEPARTMENT OF PHYSICS**



**Dr. LUIS CASASUS**  
Associate Professor  
Department of Applied  
Mathematics  
ETSII Polytechnic  
University of Madrid, Spain



**Prof. (Rtd.) M.K. JAYARAJ**  
Emeritus Professor,  
Department of Physics, CUSAT  
Former Vice-Chancellor, University  
of Calicut, Kerala

INVITED TALKS, PRESENTATIONS BY RESEARCH SCHOLARS

**About the Seminar:** Nanotechnology has emerged as a powerful tool in addressing global challenges and advancing sustainable development. By manipulating materials at the nanoscale, researchers have unlocked new possibilities in various fields, including energy, healthcare, agriculture and environmental conservation. The conference is aimed at providing a platform for researchers and scientists to assess recent trends and developments in Nanoscience for promising applications. The sessions will cover emerging experimental and theoretical research in nanoscale electronics and optoelectronics. The seminar would not only provide valuable insights into the current landscape of nanoscience but also foster collaboration and discussion among researchers, students, and industry professionals.

### INVITED LECTURES



**Dr. Priya Rose**  
International School of  
Photonics  
Cochin University of  
Science and Technology



**Dr. Subrahmanyan  
Nambodiri  
Varanakkottu**  
National Institute of  
Technology  
Calicut, Kerala



**Dr. Asha A. S.**  
Department of Physics  
Cochin University of  
Science and Technology



**Dr. Arun Aravind**  
Department of Physics  
Bishop Moore College,  
Mavelikkara, Kerala



**Dr. G. Dayal**  
Department of physics  
Indian institute of space  
science and technology,  
Thiruvananthapuram

### About the College

St. Paul's College, affiliated to Mahatma Gandhi University and Regulated by UGC is a prestigious arts and science college which functions under the Archdiocese of Verapoly. The college envisions to create a new enlightened generation which is socially committed, academically proficient, digitally updated and spiritually refined, so as to enable them to face the challenging needs of the changing times.

**The Department of Physics,** which came into existence in 1965. The Physics Department became a fully-fledged department with the beginning of an undergraduate programme in Physics in the year 1980. Post graduate programme started offering by the Department in 1984. Now the Department is a research centre under Mahatma Gandhi University.

### ORGANISING COMMITTEE

Rev. Fr. Varghese Vallyaparambil  
(Manager)  
Rev. Fr. Raphael Kalluveetil (Asst.  
Manager)  
Prof. (Dr.) Pramada Ramachandran  
(Principal)  
Dr. Poomina N. (Head of the Dept.)  
Dr. Rajeshmon V. G.  
Dr. Mary Vijilla C.V  
Ms. Jixy Joseph  
Dr. Sibha P.P  
Ms. Linu Mary Joseph

Dr. Priyesh K. V. (Co-ordinator)

Mobile : 9447295667  
Email : priyeshkv@stpauls.ac.in  
Website: www.stpauls.ac.in

Registration Fee :



Mathrubhumi - 08/11/24

☉ നാനോ സയൻസിൽ അന്താരാഷ്ട്ര സെമിനാർ സ്രെയിനിന്റെ മധ്യസ്ഥ സർവകലാശാലാ പ്രൊഫ. ലൂയിസ് കസാസസ് ഉദ്ഘാടനം ചെയ്യുന്നു

### നാനോ സയൻസിൽ അന്താരാഷ്ട്ര സെമിനാർ

**കളമശ്ശേരി** ▶ സെയ്ന്റ് പോംഗസ് കോളേജ് ഫിസിക്സ് ഗവേഷണവിഭാഗവും മഹാത്മാഗാന്ധി സർവകലാശാലാ കോളേജ് ഡിവിഷന്റെ നേതൃത്വത്തിലും ചേർന്ന് നാനോ സയൻസിൽ മുഖ്യ അന്താരാഷ്ട്ര സെമിനാർ തുടങ്ങി.

സെമിനാർ സ്രെയിനിന്റെ മധ്യസ്ഥ സർവകലാശാലാ പ്രൊഫ. ലൂയിസ് കസാസസ് ഉദ്ഘാടനം ചെയ്തു. പ്രിൻസിപ്പൽ ഡോ. പ്രമീല രാമചന്ദ്രൻ, ഫാ. വർഗീസ് വലിയപറമ്പിൽ, ഡോ. എൻ. പൂർണ്ണിമ, ഡോ. കെ.വി. പ്രിയേഷ്, ഫാ. റാഫേൽ കല്ലുവിട്ടിൽ, ഫാ. ജോൺ ബെൻ എന്നിവർ സംസാരിച്ചു.



*Multidisciplinary Research and Innovations in Applied Physics*

The Research and Post graduate Department of Physics organized a two-day national seminar on Multidisciplinary research and innovations in Applied Physics for students and researchers during January 3-4, 2025. Dr. Poornima N, Head, Department of Physics, welcomed the gathering, Prof. Dr. Pramada Ramachandran, Principal, presided the inaugural meeting, Dr. Aldrin Antony, Associate Professor & Head, Department of Physics, Cochin University of Science & Technology officially inaugurated the seminar, Principal, Rev. Fr. Jacob Biju Ben, Coordinator, Self-financing, extended felicitations to the invited guests and participants, and Dr. Subha P P delivered vote of thanks. Seven speakers from different parts of the country delivered talks on various fields in Applied Physics and 14 research scholars presented their research works.

**St. Paul's College, Kalamassery**  
 Archdiocese of Verapoly  
 Affiliated to Mahatma Gandhi University, Kottayam  
 Reaccredited with NAAC 'A' Grade  
 ISO 9001:2015 Certified by TUV Rheinland

**National Seminar on  
 Multidisciplinary Research  
 &  
 Innovations in Applied Physics**  
**3-4 JANUARY 2025**  
 Organized by  
**Department of Physics  
 St. Paul's College  
 Kalamassery**  
 In association with  
**College Development Council,  
 Mahatma Gandhi University,  
 Kottayam**

**Day 1**

**9.30 AM**  
**Dr. Aldrin Antony**  
**Keynote Speaker**  
 Associate Professor & Head  
 Department of Physics,  
 Cochin University of Science & Technology  
 Kochi, Kerala

**10.30 AM**  
**Dr. Navaneeth P**  
**Understanding Neutrinos**  
 Universe  
 Assistant Professor  
 Department of Physics  
 IT Karpur, Lathur Pradesh.

**11.15 AM**  
**Dr. T. N Narayanan**  
**Engineering Ultra thin Interfaces  
 for Energy Applications**  
 Associate Professor  
 Taty Institute of Fundamental Research,  
 Hyderabad, Telangana.

**12.15 AM**  
**Dr. Anila E I**  
**Nano Phosphors for Bio Imaging  
 Applications**  
 Professor, Department of Physics  
 Christ University, Bangalore, Karnataka

**2.00 PM**  
**Research Presentations**

**Day 2**

**9.30 AM**  
**Dr. Satish B**  
**Materials for Under Water Naval  
 Applications**  
 Scientist F  
 Defence Research & Development  
 Organization (DRDO) Kochi, Kerala

**10.30 AM**  
**Dr. Bibin John**  
**Electrochemical Energy Systems for  
 Space Applications**  
 Scientist  
 Vikram Sarabhai Space Centre (VSSC)  
 Thiruvananthapuram, Kerala.

**11.30 AM**  
**Dr. Santhosh Kumar M C**  
**Nanostructures and Thin Films for Solar  
 Energy Harnessing**  
 Professor, Department of Physics  
 National Institute of Technology,  
 Tiruchirappalli, Tamilnadu.

**12.30 PM**  
**Research Presentations**

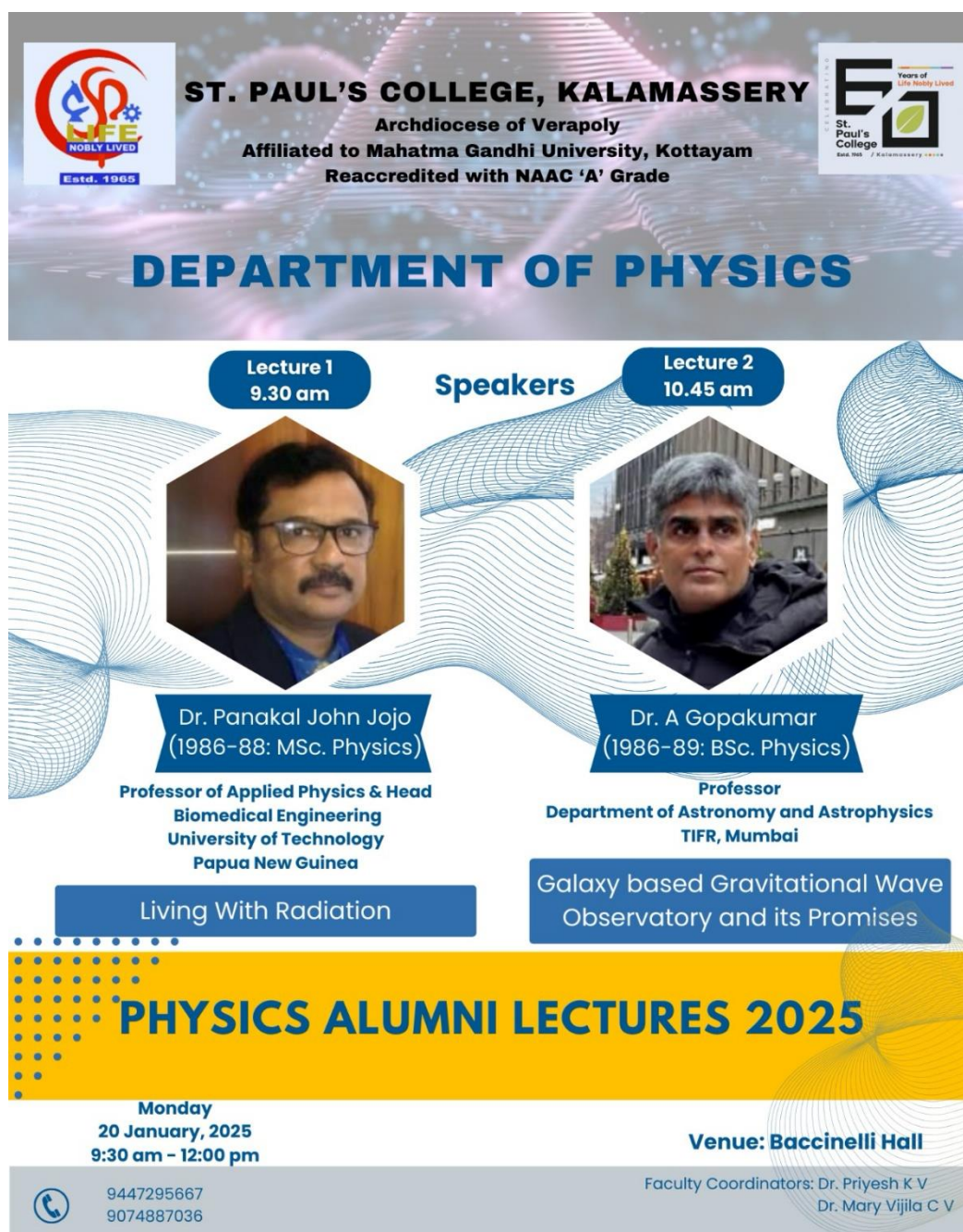


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Physics Alumni Lectures 2025

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This event aims to open opportunities for our students and teachers to interact with popular alumni of the Department of Physics. This enables them to discuss the past and present academic and non-academic scenarios. It engages them to explore the scope of learning physics and chances for research as well as career. As part of this event batch/classmates and retired teachers of the speakers are invited to participate. These alumni sessions help to imbibe human values and qualities to our students and motivate them to stand united.



The poster features a blue and white abstract background with a grid pattern. At the top, it displays the logos of St. Paul's College and the Department of Physics. The main title 'DEPARTMENT OF PHYSICS' is in large blue letters. Below this, two speakers are featured in hexagonal frames. The first speaker, Dr. Panakal John Jojo, is associated with Lecture 1 at 9:30 am. The second speaker, Dr. A Gopakumar, is associated with Lecture 2 at 10:45 am. The bottom section is a yellow banner with the event title 'PHYSICS ALUMNI LECTURES 2025' and details about the date, time, venue, and contact information.

**ST. PAUL'S COLLEGE, KALAMASSERY**  
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Reaccredited with NAAC 'A' Grade

**DEPARTMENT OF PHYSICS**

**Lecture 1**  
9.30 am

**Speakers**

**Lecture 2**  
10.45 am

**Dr. Panakal John Jojo**  
(1986-88: MSc. Physics)  
Professor of Applied Physics & Head  
Biomedical Engineering  
University of Technology  
Papua New Guinea

**Dr. A Gopakumar**  
(1986-89: BSc. Physics)  
Professor  
Department of Astronomy and Astrophysics  
TIFR, Mumbai

**Living With Radiation**

**Galaxy based Gravitational Wave  
Observatory and its Promises**

**PHYSICS ALUMNI LECTURES 2025**

**Monday**  
20 January, 2025  
9:30 am - 12:00 pm

**Venue: Baccinelli Hall**

9447295667  
9074887036

Faculty Coordinators: Dr. Priyesh K V  
Dr. Mary Vijila C V



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## Sky Watch Programme

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The science organization *Breakthrough Science Society* (BSS) was established in 1995 as a platform to create a new science movement in the country. The BSS is a non-profit social welfare organization registered under the West Bengal Societies Registration Act, 1961 with the Registration No. S/86180 of 1996-97. The event is to open opportunities for the students/teachers and other interested persons in society to understand the basics of astronomy. It provides the attendees chance for Observing the night sky which sparks curiosity about the universe and space exploration, which can lead to a lasting interest in astronomy. Admiring the evening sky is a gateway to lifelong astronomy education, fostering a love for the subject. Career Inspiration: Exposure to space exploration can inspire students to pursue careers in science and technology, even if they aren't directly related to space.

The poster features a dark blue and black background with a starry sky, constellations, and a large planet with rings. A silhouette of a person looking through a telescope is on the right. Text and logos are overlaid on the image.

**ST PAUL'S COLLEGE, KALAMASSERY**  
DEPARTMENT OF PHYSICS  
in association with  
**BREAKTHROUGH SCIENCE SOCIETY**  
Organises  
**"NIGHT SKY ESCAPES"**  
INTRODUCTORY ASTRONOMY CLASSES AND SKY WATCH SESSION  
USING MODERN TELESCOPES

Registration Fee of ₹50/-  
'Payable at the Venue'

18/02/2025  
@ 6:00.p.m onwards  
BACCINELLI HALL

Head Of Department : Dr Poornima N  
Program Coordinator : Dr Priyesh KV  
Student Coordinators : Arjun O B  
: Smeehan S Shameem  
: Elsa Teena P V

For more details : 7736611342  
: 9037956638

**Resource Persons**  
Harikumar K S  
P P Sajeevkumar  
Adv.Sajeev T Prabhakar  
P C Thankachan



