



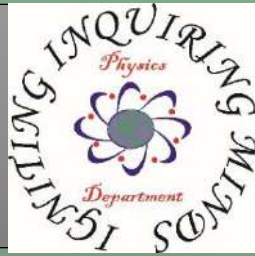
NEWS LETTER

2022-23

Department of Physics
Providence Women's College



*Centre for Research and
Post Graduate Studies*



DEPARTMENT OF PHYSICS

PROVIDENCE WOMEN'S COLLEGE



'DBT Star College'
Reaccredited by NAAC with A+ Grade
REPORT OF THE ACTIVITIES 2022-2023 IUCAA

Highlight of the department

STUDENT ORIENTED PROGRAMMES

- Observing relevant days
- Interactive sessions with eminent Alumni
- Interactive sessions with research scholars
- Skill training programs
- Career /skill training programs
- Certificate Courses
- Remedial and bridge course
- Extension activities

CONTRIBUTION TO SCIENCE

- Department of Physics has become IUCAA Centre for Astronomy Research and Development
- HSS Teacher Transformation Program
- Major Research Project and Women's Scientist Scheme
- Well-equipped laboratories
- International/National paper presentations
- Students 'Research Projects
- Publication of research articles by faculty, scholars & students
- Collaborations with research Institutes



Dr Vandana Singh
 Officer-in-charge
 Women Scientists Scheme-A (WOS-A)
 Phone: 011-26590675
 E-mail: vandanasingh@nic.in

Department of Science & Technology
 MINISTRY OF SCIENCE & TECHNOLOGY
 GOVERNMENT OF INDIA
 Technology Bhavan
 New Delhi - 110016

File No.: DST/WOS-A/PM-34/2021
 August 1, 2022
 Subject: The project entitled "Investigation of the Solar-wind Coupling with Magnetosphere-Ionosphere System During 23-24 Solar cycles."
 Dear Ms Asha VM,
 Please refer to the proposal mentioned above which you had submitted for consideration of possible funding under the Women Scientists Scheme-A (WOS-A) for Research in Basic/Applied Sciences.



CURRICULAR ASPECTS

Faculty participation in Academic Council /BoS of affiliating University /Setting of question papers /Assessment/evaluation process

Dr. A. Sobha

- BoS Radiation Physics
- Chairman of Question paper Setting – Kannur University
- Chairperson of PG Examination
- Active participation in the assessment and evaluation process

Dr. Sini R

- Member of Board of Question Paper setting- St. Joseph College Kozhikode
- Active participation the in assessment and evaluation process
- IQAC member
- UBA Coordinator
- Research Admission Committee Coordinator
- NAAC 7th Criterion Coordinator

Dr. Jeena K

- Active participation in the assessment and evaluation process
- Member of Board of Question Paper setting- Kannur UTU
- NAAC 3rd Criterion Coordinator

Ms. Siji AJ

- Active participation in the assessment and evaluation process
- In charge of the Career Guidance Cell of the department
- Nodal Officer Scholarship

Ms. Shija K

- Member of Board of Question Paper setting- Kannur UTU
- Active participation in the assessment and evaluation process
- In charge of the College Handbook 2021-2022

Dr. Aswathy S

- Staff Advisor
- Active participation in the assessment and evaluation process

Dr. Riya Jose

- Active participation in the assessment and evaluation process
- Hostel Warden

Ms. Hasna Sheren

- Active participation in the assessment and evaluation process

Name of the Certificate programs offered during the year 2022-23

Batch	Name of the certificate course	Contact hours	Number of Students Enrolled
Pg Physics	Introduction to tools and techniques in scientific research	30	27- I and II PG
III BSc Physics	Digital measurement and Instrumentation	30	40- Full Batch
II BSc Physics	Basic Astronomy	30	32- Full Batch
I BSc Physics	Introductory Computer Courses for Physicists	30	34- Full batch

TEACHING-LEARNING EVALUATION

1. ACADEMIC PERFORMANCE

▲ Pass Percentage: UG – 80.9 % PG – 64.3 %

2 STUDENTS' PROGRESSION

▲ 80% of UG students pursuing PG Courses

3. STUDENTS' ACHIEVEMENTS:

- ✓ Ms. Aleena Wilson – MSc Physics I Rank University of Calicut
- ✓ Ms Sandriya Krishnan – MSc Physics IX Rank University of Calicut
- ✓ Shamila M – JAM Physics -1051 (AIR)
- ✓ Sreelakshmi MP -JAM Physics – 2946(AIR)
- ✓ Fida Fathima – BSc Physics – Participated in 15th Radio Astronomy Winter School
- ✓ Fida Fathima – BSc Physics – Participated in UVIT Data Analysis on Galaxies -IUCAA
- ✓ Fida Fathima -Physics of Life 2023, 8th Annual Monsoon School at Simons -NCBS

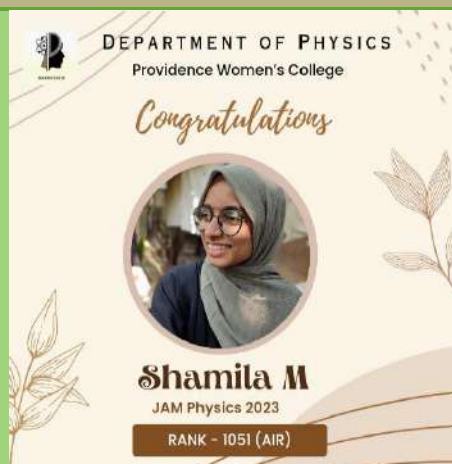
PG- MSc Physics



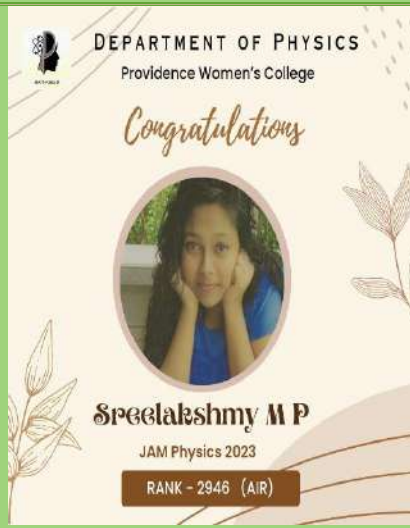
Aleena Wilson: I Rank

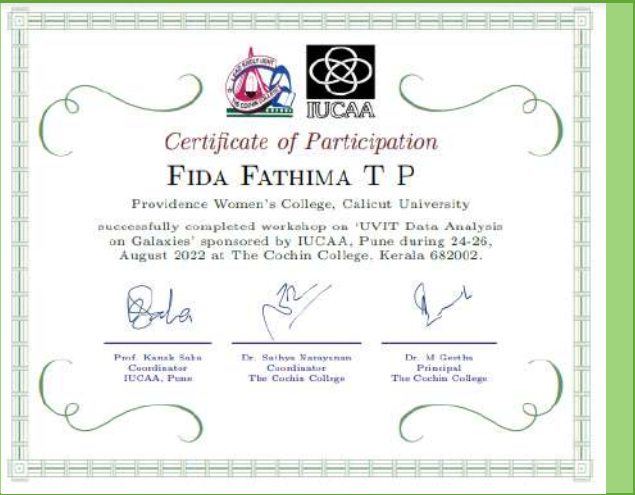


Sandriya Krishnan: IX Rank



Shamila M : III BSC Physics





STUDENT REPRESENTATION IN ADMINISTRATIVE / CO-CURRICULAR/ EXTRACURRICULAR ACTIVITIES

1. DIYA ASHRAF -I BSC PHYSICS -Won the track cycling championship at the district level.



TALENTS DAY: 16th December 2022





AZADI KA AMRIT MAHOTSAV: FREEDOM WALL: 11th August 2022



WASTE MANAGEMENT: NEW BEGINNING



RESEARCH AND DEVELOPMENT

SEMINARS/WORKSHOPS ORGANISED

1. Research Methodology: 4th November 2022

Research Methodology Seminar was organized on 4th November 2022 to equip the PG and UG students with a set of skills and potential to undertake the research very effectively and turn them into publishable material in the context of their postgraduate/graduate dissertation. The purpose of the seminar is to introduce the students to the most important conceptual approaches of research as well as to explore and formulate the research problem of their interest, the way they have to do the literature collection by selecting the journals. Seminar also covers proofreading, plagiarism, journal selection, and the research methods and tools (quantitative and /or qualitative) to carry out their research, etc. It was with immense privilege and honor for the Physics department of the college conducted the seminar with our own alumnus Pinchu Xavier, Research Scholar, Centre for Nano and Soft Matter Science, Ms. Mariot Jose Panjikaran, Research Scholar, Manipal Institute of Technology. The workshop was attended by nearly fifty-four students and faculty members.

Providence Women's College
DEPARTMENT OF PHYSICS
Seminar On
Research Methodology
On 4th November 2022

Pinchu Xavier
Research Scholar
Centre for Nano and Soft Matter Science
Bangalore

Mariot Jose Panjikaran
Research Scholar
Manipal Institute of Technology

Topics covered

- Scientific literature
- Literature collection and review
- Manuscript preparation
- Proof reading
- Journal selection
- Predatory journal
- Plagiarism

Carmel Hall
2:00 PM



2. Webinar on Introduction to Intellectual Property Rights: 13th November 2022

Department of Physics Organized a Webinar on Intellectual Property Rights on 13th November. Resource person Dr. Shahina Abdulla, IP Consultant, Tata Steel, Europe. The main objective of the webinar was to create awareness about IPRs, especially patents, and copyrights, to guide the students in respect of patenting their inventions, and to provide insight into practical applications of IP such as patent drafting, patentability search, and freedom to operate search, and evidence of use analysis.

The image shows a promotional poster for a webinar on the left and a Google Meet interface on the right. The poster is for Providence Women's College, Department of Physics, titled 'Webinar on Introduction to Intellectual Property Rights' on 13 November, Sun 16:00-17:00. It features a photo of Shahina Abdulla, IP Consultant at Tata Steel, Europe, and a Google Meet link: <https://meet.google.com/bya-hdtu-vys>. The Meet interface shows a list of participants including Agnes P John (You), Sini R (Meeting host), Aleena Akhilesh, Aneena AP, Ashida Nasreen, Ashna Sudhakar, Aswathy S, Aswini A, Esabell mariya, Fathima Nesrin, Gopika, Krishnanjana, maariya salah v, Nandana K p, Rosna, S SREELAKSHMI, Sarikasaseendran Sarika..., shahina mumthaz, Sivapriya Ck, Sreenanda P, Sruthilakshmi M, and Theertha Shaji.

The image is a screenshot of a Google Meet session. On the left, a presentation slide titled 'Regional -EPO' is shown, detailing the 'Basic steps in the European grant procedure' with a flowchart. On the right, a slide titled 'Three Criteria' is displayed, listing 'Novelty', 'Inventive step', and 'Industrial applicability'. The Meet interface shows participants shahina, You, Sini, Ashida, and 37 others.

AN INTERACTIVE RESEARCH IDEAS EXCHANGE PROGRAMME FOR STUDENTS PURSUING PHYSICS: 17th September 2022

The department conducted an online session for the exchange of some new research ideas in association with St. Pious X Degree & PG College for Women, Snehapuri Colony, Nacharam, Hyderabad. The session was on 17th September 2022. Rosann K Anto, Jeesna M S, Akhila K, Aleena Wilson, Ashna, Anjali R K, and Abhinashree of our department presented their ideas on different aspects of physics.

Departments of Physics
From
PROVIDENCE WOMEN'S COLLEGE
College with potential for Excellence
Re-Accredited with grade A+ by NAAC
Kozhikode , Kerala

&

ST. PIOUS X DEGREE & PG COLLEGE FOR WOMEN
(Re-accredited with 'A+ Grade by NAAC)
Snehapuri Colony, Nacharam, Hyderabad-500076

Present

"An Interactive Research ideas exchange
Programme for Students Pursuing Physics"
17th Sep 2022 | 10 AM to 12 AM

RESEARCH PUBLICATIONS

1. Aleena Wilson, Abhishek Nambiar, and **Sobha A** “ Synthesis of Graphene Quantum Dots by Liquid Phase Exfoliation Method and its Applications “ accepted in Materials Today Proceedings
2. K.T.Vinod, C. Baheeja, **S. Aswathy** and C.D. Ravikumar “Study of Central Intensity Ratio of Seyfert Galaxies in Nearby Universe”, Research in Astronomy and Astrophysics (RAA), Volume 23, Number 4, March 2023. DOI: <https://doi.org/10.1088/1674-4527/acc150>
3. **Alappattu John Siji** , Pushpan K Simi , K. Jesitha, Keloth Chandrasekharan “ Surface plasmon resonance included impressive absorptive nonlinearity from C -2-Phenylethenilcalix[4]resorcinarene silver hybrid system” Optical Materials 138(2023) 113638 <http://doi.org/10.1016/j.optmat.2023.113638>
4. **Alappattu John Siji**, Pushpan K Simi , R.N Cherillath Kandamangalam, Keloth Chandrasekharan “Enhanced nonlinear absorptive behavior of Phenylethenilcalix[4]resorcinarene g system” Opticraphene oxide nanocomposites, Optical Materials 131(2022) 112557 <http://doi.org/10.1016/j.optmat.2022.112557>
5. **M Sandhya**, S Sridharan On the recent negative relationship between Arctic Oscillation and Indian summer monsoon Journal of Atmospheric and Solar-Terrestrial Physics 241, 105964, 2022
6. **M Sandhya**, S Sridharan Influence of southern hemispheric upper troposphere potential vorticity intrusion events on the southwest monsoon rainfall Journal of Earth System Science 131 (4), 200,2022

PAPERS PRESENTED IN INTERNATIONAL /NATIONAL SEMINARS BY RESEARCH SCHOLARS

Ashna V M

- Paper presented: “An Investigation on the Efficiency of Viscous Interaction during Intense Northward IMF Bz events of 23- 24 Solar Cycles” AGU Fall Meeting 2022 held in Chicago and online everywhere 12 - 16 December 2022
- Paper presented “Intense Northward IMF Bz events during geomagnetic storms of 23- 24 solar cycles” URSI Regional Conference on Radio Science (URSI-RCRS 2022) held in IIT Indore from December 1-4, 2022
- Presented a work entitled: unexpected space weather causing the re-entry of 38 Starlink satellites in February 2022 during 2nd Iberian Space Science summer school, Spain, June 2022, coordinated by NASA, ISWI, SCOSTEP, ISEE
- Presented a paper titled Solar Cycle Dependence Of Electric Field Efficiency In Intensification Of Ring Current during 23-24 solar cycles” during 15th Quadrennial
- Solar-Terrestrial Physics (STP- 15) symposium, 21-25 February 2022, organized by the Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)

Akhila

- Presented a poster on “X-ray/ Ultraviolet Spectrum of the NLSI galaxy MRK0279 using multi-epoch observations” at ASI2023 held at IIT INDORE

PAPERS PRESENTED IN /NATIONAL WEBINARS BY STUDENTS

- **Aleena Wilson (MSc Physics)** participated and presented a research paper in the 10th National Conference on Condensed Matter Physics and Applications held at Manipal Academy of Higher Education, Manipal on December 02-03 2022
- **Jeesna MS (MSc Physics)** participated and presented a research paper in 10th National Conference on Condensed Matter Physics and Applications held at Manipal Academy of Higher Education, Manipal on December 02-03 2022



MAJOR FUND GENERATED: ONGOING

Title	Funding Agency	Order No. Amount	Principal Investigator
Astrosat Observations of AGNs: broadband spectral analysis and variability	ISRO	3 Years 2020-2023 18 lakhs	Dr. Jeena.K

WOMEN SCIENTIST SCHEME A(WOS-A)

Title of the Project	Funding Agency	Fund in Lakhs& duration	Teachers in Charge
Influence of Extra-Tropical Forcing on Asian Monsoon Agriculture and Economy	Ministry of Science and Technology	Rs.24.86 Lakhs Years (2019-2022)	Dr. Sandhya M & Dr.Latha P (Mentor)
“Investigation of the Solar-wind Coupling with Magnetosphere-Ionosphere System During 23-24 Solar cycles.”	Ministry of Science and Technology	Rs.20.57 Lakhs Years (2022-2025)	Ms. Ashna VM Dr.Sini R (Mentor)

GRANTS RECEIVED FOR RESEARCH SCHOLARS

Ashna V M

- Selected for travel support from Centre for International Collaborative Research (CICR)Institute for Space Earth Environmental Research (ISEE)Nagoya University Japan

FACULTY AS RESOURCE PERSON

- Dr. Jeena K Delivered a talk on Research areas in Astronomy and Astrophysics to Higher secondary school teachers for the 10 days Teachers’ Transformation Program organized by the Directorate of General Education and Collegiate education
- Ms. Siji A.J Delivered a talk on Introduction to nonlinear optics to Higher secondary school teachers for the 10 days Teachers’ Transformation Program organized by the Directorate of General Education and collegiate education
- Dr. Aswathy S Delivered an inaugural talk titled “Story of a Giant Leap: From Earth to Moon” during the Moon Landing Day celebration at Sree Narayana Guru College, Chelannur on 20th July 2022.

PARTICIPATION IN INTERNATIONAL /NATIONAL WEBINARS BY FACULTY

Dr. Jeena K

1. Eighth southern regional astronomy meeting at Rajagiri School of Engineering and Technology, RSET, Kochi, from Feb 17- 19, 2023
2. Workshop on Introductory Astronomy and Astrophysics, at Marthoma College, Chungathara on 7-12-2022

3. 4th National Conference on high energy emission from active galactic nuclei, at Farook College, Calicut, from 12-14 August 2022

FACULTY DEVELOPMENT PROGRAM

- **Dr. Sobha A, Dr. Sini R , Dr. Jeena K , Ms. Siji AJ, Ms Shija K , Dr. Aswathy S, Dr. Riya Jose** Attended 5 days KSHES-Let's Go Digital Training Programme on Learning Management System (Moodle) 6th March 2023-10th March 2023

Ms. Siji AJ

1. "National Education Policy- 2020" conducted by TLC, Ramanujan College, University of Delhi from 20-26 March 2023

Ms. Shija K

1. "National Education Policy- 2020" conducted by TLC, Ramanujan College, University of Delhi from 20-26 March 2023

Dr Aswathy S

1. "Teaching- Learning Methods: From Micro- Teaching to Peer Learning" conducted by TLC, Ramanujan College, University of Delhi from 11-17 June 2022.
2. "National Education Policy- 2020" conducted by TLC, Ramanujan College, University of Delhi from 20-26 March 2023.

DETAILS OF THE CAREER COUNSELLING PROGRAM: 1st August 2022 & 13th March 2023

1. On the first of August 2022 JAM Orientation classes were taken by FUTURING to the Students of the Department of Physics, Providence Women's College, Calicut. Two Representatives from Alchemy Coaching Centre described their Classes, the Structure of the classes, and the FTSE (Futuring Talent Search Examination) which is designed to assess the basic Understanding of Physics. On March 13 higher study opportunities and job scope after BSc Physics was delivered by a resource person for An Academy.





INTERACTIVE SESSION WITH ALUMNI FOR HIGHER STUDY OPPORTUNITIES

Dr. Reshmi Rajendran on 17th Feb 2023



Ms. Anjali T Vinod on 10th Feb 2023



Dr. Reshmi Rajendran (1994 BSc Physics)

Ms. Anjali T Vinod (2020 BSc Batch)

Director of Danone's Global R&I Precision Nutrition D-Lab based in Singapore, has more than fifteen years' experience leading teams in research and innovation , both across universities. She motivated the students and offered all helps for searching the higher education

Presently doing her higher studies in South Korea, shared her experience and gave guidance about the scholarships available for pursuing higher studies in foreign university

CAPACITY BUILDING AND SKILLS ENHANCEMENT INITIATIVES

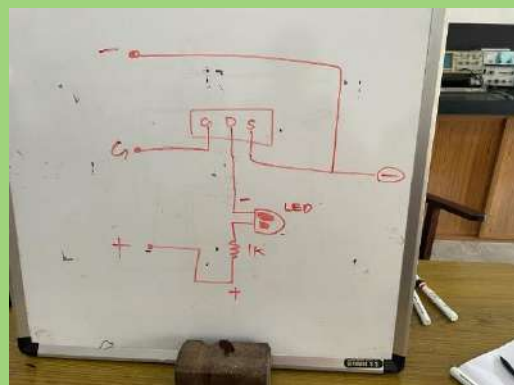
1. WORKSHOP ON HEARTFULNESS MEDITATION 22.06.2022 TO 24.06.2022

Department of Physics, Providence Women's College in collaboration with Heartfulness Institute, Hyderabad organized a three-day workshop on Heartfulness meditation for the second and final-year UG students of the department. This workshop was organized as part of the International Yoga Day celebration in 2022 and the students were introduced to meditation and relaxation techniques during the workshop. Prof. (Rtd). M. P Madhusudhanan and Mrs. Ranjini Prasad (Facilitators, Heartfulness Institute) handled the sessions and 50 students participated in the workshop.



2. PRAJVAL: SOURA RACITA KALA – A TRAINING PROGRAM

A training program on assembling solar garden lights using sensors was given to selected students by a trainer Mr. Anilkumar PK an expert in the R&D wing of Electronics and Robotics of Curiefy Science Lab, CUSAT on 25th October 2022. The training was given to the students with the intention make them resource persons to reach society.



BRIDGE COURSE AND REMEDIAL CLASSES

A bridge course for newly admitted students of UG and PG is conducted soon after the commencement of the first semester of classes. The main objective of the course is to bridge the gap between subjects studied at the Pre-university level and subjects they would be studying at Graduation. The course is framed in such a way that they get basic knowledge on the lab equipment which they would be learning through graduation/post-graduation. Physics experiments help each student improvising their approach to the subjects and they also help students in learning how to be patient and careful while taking observations and doing the error analysis. Remedial classes are organized on working days after regular class hours, A Special focus is laid to equip the students to help them perform well in the exams by making them in groups. Proper monitoring and assessment were done by the teachers.



OBSERVING RELEVANT DAYS



READING DAY CELEBRATION 2022: 21st June 2022

As part of the Reading Day 2022, Department of Physics, Providence Women’s College Calicut organized a one-day program on 21st June 2022, focusing on raising awareness about the significance of Reading in our day to day lives. Various competitions were organized as part of the day which Included reading competition, quiz competition and other minor Games to encourage the virtue of reading; giving added attention to Our mother tongue- Malayalam, urging to cherish it throughout our lives.

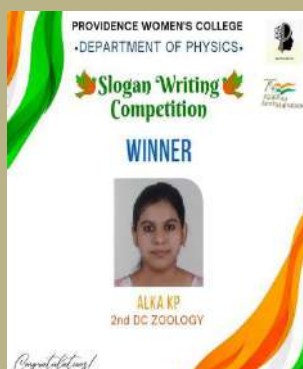


MOON DAY – MANGATA 2022 20th July

As part of the International Moon landing Day 2022, Department of Physics, Providence Women's College Calicut conducted a quiz 'MANGATA' on 20th July 2022. It included 2 rounds with the first round as written and the second round as Rapid Fire with the 4 top scorers of the first round on various aspects and importance of Moon Day. The winner of the quiz is Minnu of 3rd DC Physics. Dr. Sini gave the prize to the winner.

MOON DAY – LA LUNA 2022: 1st August

The Department of Physics, Providence Women's College Calicut in relation to the 53rd Moon Landing Day presented La Luna. To the Moon and Back. A fun little chance to visit the Moon. It was a little party that started at 12 pm at the 2nd PG Physics Class on 1st August 2022. The program was inaugurated by Ms Bindu, HOD, Department of English. As part of this program, a space atmosphere was created for the visitors. Before entering the space an interesting quiz competition as well as a corner was set up for writing captions. Inside the space setup there was a chance to meet, interact and take photos with the astronauts



INDEPENDENCE DAY CELEBRATION 8th Aug to 15th Aug 2022

As part of the Independence Day Celebration 2022, Department of Physics, Providence Women's College Calicut organized various programs from 8th August 2022 to 15th August 2022. It included:

- Letter Writing Competition with the topic 'Letter to Your Favorite Freedom Fighter'. Nandana M of 3rd Year BCom was the winner.
- Slogan Writing Competition with topic 'Freedom@75'. Alka K P of 2nd Year Zoology was the winner.
- Photography Contest with topic 'Tricolor'. Arya Dinesh R of 2nd Year Botany was the winner.
- Patriotic Song Competition was held on 10th August 2022. 3rd Year English team comprising 5 members – Sneha Vijay, Sharin C, Jelna Praveen, Gopika Satheesh & Meghana V were the winners.

E- Certificates and Prizes were provided to the participants and Winners respectively.

TEACHER'S DAY: 5th Sept. 2022

Teachers Day Celebration was organized by the Department of Physics, Providence Women's College Calicut on August 30, 2022, at 2 pm in the MV Hall. It included Cake Cutting, games for Teachers, and various cultural events organized by 2nd and 3rd Physics students



including dance, Songs, skit, Presentations etc ..



WORLD PEACE DAY: on 20th September 2022

Department of Physics conducted a debate on the open stage regarding UN Peace Day. The topic of the debate was 'Is science & technology a catalyst for peace'. Dr. Sini of the Department of Physics and Dr. Priya of the Department of History were the moderators. The debate was conducted on 20th September 2022, Tuesday, on the open stage.

EXTENSION AND OUTREACH PROGRAMS OF THE DEPARTMENT

1. In the month of August 2022 2nd year BSc Physics students of Providence Women's College visited the nearby places at Malaparamba to make aware peoples the importance of linking their Aadhaar cards with Voter IDs. Students also helped people to link their Aadhaar cards with voters' IDs.



2. In the month of October and November 2022, third-year and second-year B.Sc. Physics students of Providence Women's College visited Kuruvatoor Panchayat, Kozhikode for arranging and stacking the files. Also, lending their help in finding misplaced files. They found the work to be enlightening and had the opportunity to peek a closer look into the work-life of government employees; an invaluable asset to students who might pursue a career in government service.



3. SCIVERSE: PHYSICS EXHIBITION : 1&2nd November 2022

Physics Department organized an Exhibition on the 1st and 2nd of November 2022 between 9.30 am to 4.30 pm at our lab premises. Our science exhibition is a small offering to our nation and society. We believe that strides of science and technology alone can liberate our motherland in the modern world. And therefore, we strive quietly to construct a scientific and creative attitude among young minds. The preparations of the exhibits are an exhilarating experience for the students, including the improvisations of science kits and devices/ models offering solutions to many present and potential socio-economic problems. Around 700 plus one and plus two students along with teachers from various schools visited the exhibition and gave their feedback.



4. Higher Secondary Teachers Transformation Program (HSTTP)

Department of Physics Providence Women's College organized 10 days (9-12-2022 to 18-12-2022) in-service training program for the Higher Secondary Teachers in all over Kerala in association with the Directorate of General Education and collegiate education. 40 higher secondary teachers from various schools from different parts of Kerala participated in the transformation program. It aims to empower teachers to strengthen higher secondary education by providing an excellent and quality academic experience. It was a full-time residential course that started with an interaction with the representatives of students from B. Sc, M. Sc and research scholars on what they expected as students from teachers. Followed by various activities like research programs by sharing the latest development in the various areas of physics research, workshops, hands-on training lab sessions led by our own PG and UG students, Skywatch, library

activities, field trips, entertainment programs, presentations, and debates. Many eminent faculties motivated the teachers by sharing knowledge and telling them how to approach the students psychologically and the overall ultimate aim of the teachers' transformation program was to update and upskill the teachers for adopting effective strategies and thereby ensure quality education to our coming generation.





FIELD VISIT

1. INDUSTRIAL VISIT VISVESVARAYA INDUSTRIAL AND TECHNOLOGICAL MUSEUM, BANGALORE (VITM) ON 09.01.2023

Final year UG and PG physics students had an Industry visit to Visvesvaraya Industrial and Technological Museum, Bangalore (VITM) on 09.01.2023. Students mainly learned the evolution of science, especially levers, tools, gears, the evolution of clocks, sewing machines, typewriters, telephones, printing machines, etc from the first floor. Then they moved to the technology section and learned about how solar electricity, hydroelectricity, and thermal electricity are produced and how we can utilize them. They have also displayed the state-wise distribution of power supply. They had also shown the evolution of batteries, current, transistors, diodes, five generations of computers, and other exhibits like digital clocks, etc. Finally, they visited space technology there were some rare pics of astronauts like the first astronaut to go into space, then they have shown how rockets are launched, about astronauts, space programs, satellites, space shuttles, and important events of space that occurred in the world.





2. VISIT TO REGIONAL SCIENCE CENTER & PLANETARIUM ON 28TH FEBRUARY 2023

On science day II BSc and I PG Physics students of Providence Women's College Science department arranged a field trip to the Planetarium on 28th February 2023, in order to enlighten the students on concepts related to the solar system, mechanics, and working models to understand the basic science concept in a much better manner. Students got an opportunity to listen to a popular talk Global Science for Global Wellbeing delivered by Dr. P Mohamed Shafi, Professor (Rtd), Department of Chemistry, University of Calicut. At the planetarium, the resource person informed the students of the latest developments in the field of astrophysics and India's contribution to the same. The students were also shown the movie "Our Universe" which showcased the arrangement of planets, the position of stars, and other interesting facts about the galaxy. The trip proved to be an enjoyable learning experience for the students.



ORPHANAGE VISIT: 25th MARCH 2023

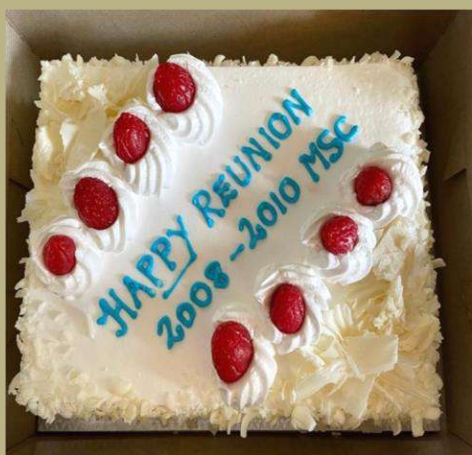
BSc. Physics Students of Providence Women's College visited the home for Mentally Disabled Children in Vellimadukunnu Kozhikode on 25th March 2023, which caters to the needs of mentally challenged children. The objective of the visit is to make aware the students accept the differently abled children who are unable to do routine activities by themselves and to learn how to prepare them to do activities and jobs themselves with their possible ability to help the family as well as the society to uplift the differently abled children to the mainstream of the society. It

was a good experience and an eye-opener and the students supported the meal expenses and served the lunch.



REUNION -ALUMNI MEET: 13th August

A coming back to a place that shaped the trajectory of one’s own life is a priceless and unexplainable experience. Meeting old students who traveled in different directions and sharing their life experiences with them makes this coming back an unforgettable event. An Alumni Meet was organized in the Department of Physics on 13th August and 25 December 2022. from 10.00 am onwards. The event was stimulating and enjoyable and all members shared their journey after their graduation/postgraduation from providence college. The alumni members sincerely expressed their gratitude towards the past and present teachers for the guidance and value they had achieved from the department.





ASSOCIATION VALIDATORY & MAGAZINE RELEASE. -29th March 2023

Association Validatory function held on 29th March with Ms. Bindu Amat, HoD English Department, Providence Women's College. 45th Manuscript Magazine PHOENIX was released on the same day. Prizes offered by the departments for the various achievements during the year 2022-23 were also distributed to the students.

