

PHYSICS ASSOCIATION REPORT 2022-23

The Department of Physics offers B.Sc. Physics (Vocational-Model II Applied Electronics) from the year 2001 onwards and new course-Integrated Programme in Basic Sciences-Physics from 2021 onwards. Department aims to up skilling knowledge in all areas of Physics. Besides, department promotes Vocational Education Training and Energy & Environmental Protection.

Head of the Department: Dr. Anupama P.

Lecture in charge of Physics Association: Dr. Rajani Jacob

Following students were selected as the office bearers.

Association Secretary: Ms. Krishnendu K. (II IP Physics)

Committee Members: Ms. Aiswarya Ramesh (III B.Sc. Physics)

Ms. Syamini Sasi (II B.Sc. Physics)

Ms. Saliha V N (I B.Sc. Physics)

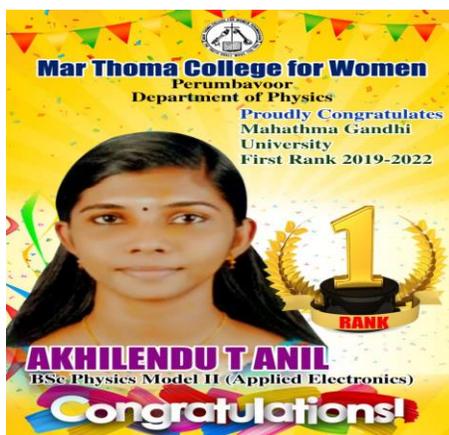
Ms. Anna M R (I IP)

With the whole hearted support of the Head of the Department and other teachers of the department, Physics association initiated and supported various social activities, training programmes and coaching for curricular and extra-curricular activities. The details of the programs conducted are given below.

➤ **MAJOR ACHIEVEMENT**

- **I Rank** in the MG University BSc Physics Model II (Applied Electronics) examinations during the academic year 2021-2022.

Akhilendu T Anil



➤ **VIRTUAL LAB WORKSHOP** – Department conducted a virtual lab workshop on 08 July 2022 for all the students from science stream. Resource person was Mr. Saneesh P. F, Project Manager, Amrita Vishwa Vidyapeedham.



➤ **INDEPENDENCE DAY CELEBRATION**

Physics Association conducted various programmes as a part of Independence Day celebration:

- E-Booklet -Memories of freedom movements was published.
- Animation movie – Let them fly was created and presented by the students.
- Documentary – 75 Indian scientists and history of Indian independence was presented.

➤ **THE PLASMA EXHIBITION**

Students of Physics department visited the plasma exhibition – A Scientific outreach program organized by **Institute for Plasma Research (IPR)** on 22 September 2022 at Bhavan's Adarsha Vidhyalaya, Kakkanadu, Cochin



➤ WORLD SPACE WEEK CELEBRATIONS

Department organized **Sun Spot Watching** and Expert talk on **Sun and Solar System** in association with **Breakthrough Science Society** on 07 October 2022. Resource Persons of the programme were Mr. Harikumar K.S, State executive Committee Member, Break through Science Society, Kerala Chapter and Mr. P.P. Sajeevkumar, District Secretary, Break through Science Society, Ernakulam Chapter, Adv. Sajeev T Prabhakar, Amateur Astronomer.





➤ INNOVATION DAY CELEBRATION

Department of Physics in association with Institution's Innovation Council (IIC) and IQAC celebrated innovation day on 15th October 2022 to commemorate the birth anniversary of former President of India, Bharat Ratna Dr. A.P.J Abdul Kalam and conducted an online quiz.

➤ PHYSICS ASSOCIATION INAUGURATION

Physics Association was inaugurated by **Mr. A. V. Satheesh, Scientific Officer, Kudankulam Nuclear Power Plant Tamil Nadu** on 7 November 2023. He delivered a lecture on "Nuclear Reactors".



➤ **LED STAR MAKING**

The students of Department of Physics under the leadership of faculties of the department made LED stars and sold them during the months of November and December, with the profits going towards a good cause. The funds were donated to Daivadan, an Old Age Home in Malayattoor, during a visit on December 22nd, 2022. Furthermore, celebrating Christmas at the old age home must have been a joyous occasion for both the residents and the members of the Department of Physics. This is an excellent example of how science and technology can be used for a noble cause. It is also commendable that the profits were donated to an Old Age Home, which is an often-neglected segment of society. By contributing to this cause, the Department of Physics has shown that they care about the welfare of the elderly and are willing to take concrete steps to support them.





➤ **ENCON 2022**

Department of Physics of our college was an organizing partner of the 5th National Energy Congress, **ENCON 2022**, which was held in Angamaly from December 12-14, 2022. The theme of the congress was "Energy Efficiency, Renewable Energy, and Green Technologies". The congress was supported by the Government of Kerala, the Energy Management Centre, KSEB, and the Energy Conservation Society. Teachers and students of Integrated MSc Physics participated in the three-day seminar, which featured a variety of keynote speeches, presentations, and panel discussions on various topics related to energy efficiency, renewable energy, and green technologies. Overall, the ENCON 2022 was a great opportunity for the students to learn about the latest developments in the field of energy efficiency, renewable energy, and green technologies.

➤ **NATIONAL ENERGY CONSERVATION DAY CELEBRATIONS**

Energy Conservation Rally and Signature Campaign

Department of Physics in association with Energy Management Centre, Urjamithra and CED conducted an Energy Conservation rally and signature campaign on 15 December 2022. The rally was inaugurated by Mr. Sakeer Hussain, Municipal Chairman Perumbavoor at Subhash Park, Perumbavoor. More than hundred students participated in that campaign.



Energy Efficiency And Energy Conservation Workshop

As part of National Energy Conservation Day Celebrations 2022, Department of Physics Mar Thoma College for Women Peumbavoor in association with **Energy Management Centre, Kerala** conducted a one day '**Energy Conservation and Energy Efficiency Workshop**'. Rs. 1 lakh was sanctioned by EMC for conducting the programme. The specific topic of the sessions was 'Energy Storage'. The workshop started with an inaugural session followed by technical sessions. 52 delegates from all over Kerala attended the program.



- **Resource persons for the Inaugural Session:**

Mr. Manoj K, Assistant Executive Engineer, Electrical Sub Division, KSEB, Perumbavoor.

Special guest of the programme was the ‘**Akhshaya Urja Award Winner 2021**’ of Kerala State,

Mr. N. P. Antony, Managing Director of Pavizham Group.

- **Resource persons for the Technical Session:**

1. Mr. Muhammed Afsal Pary, Deputy Manager-Energy & Electrical Safety, TCC Ltd.

2. Mr. Baby Kuriakose, GM, Renergy Systems India Pvt Ltd.

➤ **NATIONAL SCIENCE DAY CELEBRATION 2023**

On 28th February 2023, the Department of Physics, celebrated National Science Day at the PG Seminar Hall, with the theme "Global Science for Global Wellbeing". The event's inauguration and keynote address were given by Prof. Dr. V P N Nampoori, formerly a professor of photonics at CUSAT. He spoke about the legacy of Sir C V Raman and his contributions to the field of physics, particularly in the study of light scattering. He emphasized the importance of science in addressing global challenges such as climate change, poverty, and health.



➤ **SCIENCE EXHIBITION: EXPLORING THE WONDERS OF SCIENCE**

On 27th, 28th February and 1st March 2023, the Department of Physics at Mar Thoma College for Women, Perumbavoor celebrated National Science Day. As a part of this celebration, the students of the Department of Physics organized a science exhibition in the Physics Lab. The exhibition aimed to showcase the scientific knowledge and creativity of the students.



➤ **VISIT TO PONDICHERY UNIVERSITY**

On February 4th, 2023, a group of students from the Department of Physics visited Pondicherry University. During their visit, the students had the opportunity to tour several

facilities, including the Physics General Lab, Photonics Lab, and Central Instrumentation Facility.



➤ COMPETITIVE EXAMINATIONS AND COACHING

Talent Search Exam (TSE-2022-23) was conducted in association with Academy of Physics Teachers (APT), Kerala. Students from first, second and third year BSc Physics and Integrated Physics classes attended the exam. Krishna V S of second Integrated Physics qualified to second level of the exam.

➤ ACHIEVEMENTS OF STUDENTS

- **Krishnendu K and Laya S Pillai** of Integrated MSc Physics presented a paper in multidisciplinary online **International Conference** organized by St. Stephens College, Uzhavoor. They secured second and third position respectively in the competition.
- **Shahanas T S** of third BSc Physics secured first prize in All Kerala quiz competition conducted by Breakthrough Science Society.
- **Shahanas T S and Daya Das P.K** of third BSc Physics secured third prize in 8 th intercollegiate Energy Quiz Competition 2022 conducted by Energy Management Centre and Energy conservation society Kerala in Sacred College Chalakudy.
- **Krishnendu K K** and team of Physics department secured 2nd prize in Thiruvathira conducted by our college as part of Arts Festival.
- **Krishnendu K K** participated in western string competition in MG University Art's Festival.
- **Laya S Pillai** of Integrated Physics secured second prize in preliminary level of Power Quiz

organized by Department of Physics in association with KSEB.