

## **PHYSICS ASSOCIATION REPORT 2019-20**

For the academic year 2019-19, Dr.MelviChandy served as the Lecture in Charge of Physics Association. Following students were selected as the office bearers.

Association Secretary: Ms. Anjima K. P (II DC Physics)

Committee Members: Ms. Anitha Thomas (I IDC Physics)

Ms. Varsha M vijay (III DC Physics)

Ms. Fathima Shiril(I DC Physics)

Physics Association was inaugurated by **Dr. Ison V Vanchipurackal** HOD, Department of Physics, St Thomas College, Palaion 27 August 2019. He delivered a talk on “**Material Science and Engineering: Opportunities and Challenges**”.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.

### ➤ **ENVIRONMENT MANAGEMENT TRAINING, GO GREEN-EMT 2019**

Department had organized an **Environment Management Training Programme“ EMT- Go Green 2019”** from 11 to 14 Januray 2020 in association with Kerala State Council for Science, Technology and Environment(KSCSTE). **Prof. (Dr.) Sabu Thomas** Honorable Vice Chancellor of Mahatma Gandhi University Kottayam inaugurated the function. The four day programme consists of various talks from reputed resource persons like Mr. A. Satheesh, Scientific Officer, Koodankulam Nuclear power Plant, Tamil Nadu, Dr. K. Soman, President, Energy Conservation Society(ECS), Mr. Baby Kuriakose, Secretary ECS Kerala, Mr. Santhosh A., Auditor, Mr. Alexander, Retd. Farm Manager.



Inauguration of EMT-Go Green 2019 by **Prof. (Dr.) Sabu Thomas** Honorable Vice Chancellor of Mahatma Gandhi University Kottayam.

### ➤ INSTALLATION OF PIPE COMPOSTING SYSTEM IN COLLEGE



As a part of GO GREEN-EMT 2019 Mr. Alexander K.P, Rtd. Farm Manager, Always Settlement handled a Hands-on training session on “Household Waste Management”. The session included student involvement in disposing the household waste. Taking inspiration from his talk we introduced pipe composting in our college premises. He also taught about Hybrid Waste Management System which uses Black fly.

### ➤ NATIONAL SCIENCE DAY CELEBRATIONS

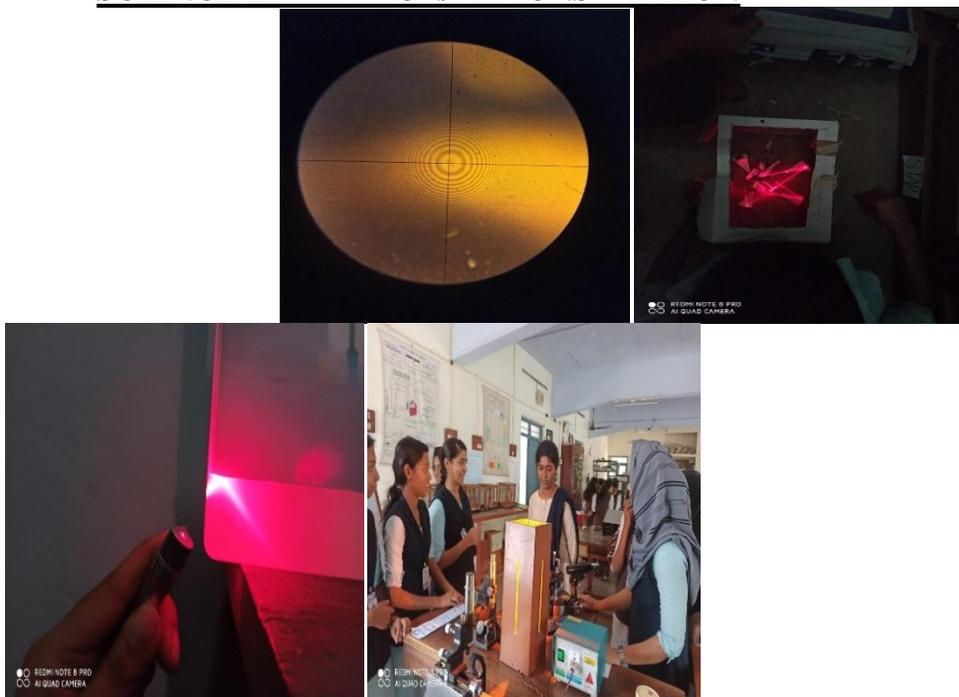
Department celebrated National Science Day on 17 and 18 February of 2020 in association with **Kerala State Council for Science, Technology and Environment (KSCSTE) and DST, Government of India**. We arranged Science Lecture, Science Exhibition and Documentary Presentation.



Inauguration of NSD-2020 by Prof. (Dr.) K. Babu Joseph, Former Vice Chancellor, Cochin University of Science and Technology (CUSAT), Cochin.

Prof. (Dr.) Babu Joseph, former Vice Chancellor, Cochin University of Science and Technology (CUSAT) inaugurated the programme and delivered a talk on “Scientific Temper”. Dr. Anju Paulose, St. Theresa’s College, Ernakulam delivered a lecture on “Recent Research Trends in Material Science”. The talk helped the students to get a general awareness on the various fellowships and opportunities in research field.

## ➤ SCIENCE EXHIBITION/DEMONSTRATION



A Science exhibition had been arranged by association on the occasion of NSD-2020 wherein students of our departments showcased various experiments which can be used for learning scientific concepts. Students from all branches are welcomed for this demonstration session.

## ➤ FLOOD RELIEF ACTIVITIES

Physics association actively corporate with the flood relief activities of the college.



The Dept. of Physics handed over 100 LED bulbs to **Trissur District Collector** to distribute among the flood affected areas of Wayanad, in an Inter-Agency Group Meeting at Trissur Collectorate. The bulbs were made by the students of the department.

Our final year students had enthusiastically participated in **cleaning program of flood affected houses**, organized by the college. Teachers and students had had generously contributed to the university flood relief fund. The department had distributed bags, pens and books to flood affected students in the **Ashramam School**. Teachers and students had also contributed groceries to **NSS flood relief campaign**.

## ➤ VOCATIONAL EDUCATIONAL TRAINING PROGRAMME

Physics department had offered three vocational educational training programs during the year 2019-2020 viz. LED bulb making, LED lamp making and student solar ambassador program.

### LED BULB MAKING



The students were given training to make LED bulbs under **Vocational Education Training Programme** by the teachers of the Physics department.

### LED STAR MAKING



In continuation from previous years, in 2019 also, students of Physics department made **LED stars** and the stars were put for sale. The profit amount was given to an Old Age Home, Deivadan, Malayattoor on 18 December 2019. The entire staff and students celebrated Christmas with them as last years on that day.

### STUDENT SOLAR AMBASSADOR PROGRAM



“**Student Solar Ambassador Workshop**” has been organized by the department in association with **IIT, Mumbai** and **Energy Conservation Society** as part of **Gandhi global yathra**. Training on Solar lamp assembling has been given to all the students of our department. As a part

of this training on solar lamp assembling has been given to students of Asramam Higher Secondary School, Perumbavoor, Kallil Government Higher Secondary School, Perumbavoor and Government Boys Higher Secondary School, Perumbavoor

➤ **LIFE SKILL AND SOFT SKILL TRAINING**

Department conducted various life skill and soft training for the students of our department. The training sessions were handled by various eminent personalities in respective fields.

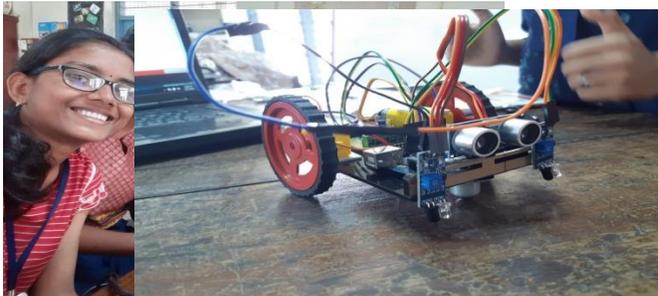


Life Skill Training was given to the students by **Dr. M R Santha Devi, Retd. DRDO Scientist.**



Soft Skill Training was given to the students by **Ms. Manisha Bilani** from **Make Intern Group.**

➤ **CERTIFICATE COURSE IN ROBOTICS**



Department of Physics conducted a 30 hour **certificate course** on “**Robotics**” in association with Teqard Labs Pvt Ltd. Kochi during July-August 2019. 42 students successfully completed the course. During the workshop students learned how to control the action of a robot using various

commands using programming language.

## ➤ COMPETITIVE EXAMINATIONS AND COACHING

Teachers of the department are giving constant directions and encouragement to the students to prepare and write competitive exams. Talent Search Exam (TSE-2019) was conducted on 15 December 2019 in association with Academy of Physics Teachers (APT). 30 students from first, second- and third-year classes attended the exam. Varsha M Vijay of third BSc Physics had qualified JAM-2020 (Joint Admission Test for MSc, Reg. No: 16379).

## ➤ VISITS

### 1. Visit to VSSC

Every year department arranges visits to various science institutes and industrial centers to make the students interact with the peoples of important departments. This year department organized visits to **Vikram Sarabhai Space Centre (VSSC)** Thiruvananthapuram and Koodankulam Nuclear Power Plant



Teachers and students of the department had visited **Vikram Sarabhai Space Centre (VSSC)** Thiruvananthapuram on 9 October 2019 during the **World Space Week Celebrations**.

### 2. Visit to Koodankulam Nuclear Power Plant, Tamil Nadu



Teachers of the department and final year students had done an industrial visit to Koodankulam Nuclear Power Plant on 5 February 2020.

### **3. Visit to Iringol Kavu**

As part of EMT 2019 program, a visit has been made to Iringol Kavu, a heritage centre in Perumbavoor by the students and teachers of the department.

### **➤ FAREWELL**



First year and second year students bid a warm farewell to the final year students with lunch and entertainment programmes.

### **➤ STUDENT ACHIEVEMENTS**

Students are always motivated to participate in extra-curricular activities and various competitions. Most of them were participated in presentation competitions, quizzes and other competitions in intercollegiate and intracollegiate levels. The major achievements of the year 2019-2020 are listed below

- Four students of our department had secured **University rank** last year. Ranks: Anjana K.S ( Third Rank), AiswaryaMuraleedharan (Fifth Rank), Afnitha Kareem (Sixth Rank) and Anupama Ravikumar(Seventh rank)
- **Varsha M Vijay** of third BSc Physics had received Best Parliamentarian Award in **Model Parliament Competition** conducted Institute of Parliamentary Affairs, Government of Kerala. She received **MalayalasreePuraskaram- Vahana Poornima VayanaVaaram - Department of Cultural Affairs ,Govt. Of Kerala.**
- **Ms. Arsha S Kumar** of third BSc Physics had worked on a project during May-June 2019 as a **Summer Research Fellow** under the supervision of **Dr. Arijit Kumar, Indian Institute of Science, Education and Research,(ISER)** Mohali. It is jointly sponsored by IAScBanglore, INSA Delhi and NASI Prayagraj.
- Jeny Rose Job, Aneeja George, Arya Sivan, Arsha S Kumar, Varsha M Vijay from third BSc Physics got selected and participated in **Wetlamp Championship 2K19, IIT Hyderabad.**

### YOUNG INNOVATORS PROGRAMME (YIP)



- The **YOUNG INNOVATORS PROGRAMME (YIP)** is an initiative of Kerala Development & Innovation Strategy Council (K-DISC) to promote innovation and problem solving ability amongst students across Kerala. Two teams consisting of five students from the Department of Physics participated in the Maestro Challenge of YIP 2019. The team lead by Jinu John (Team members: Jinu John, Varsha M Vijay, Arsha S Kumar, Arya Sivan, Niya Merrin Mathew of III B.Sc Physics) has won the final state level competition, for their innovative idea-“AI based Signal Interpreter”. **Jinu John** attended the National Knowledge session held at Thiruvananthapuram on first Kerala Innovation Day (23 January 2020) inaugurated by the Hon’ble Chief Minister. The team lead byAnjimaK.P (Team members: Anjima K.P,Anitha Thomas, Sara Abey, Ann Maria Jose and Anagha Joy of II B.Sc Physics) was selected up to the final state level competition after the initial level screening and the district level competition held at Kalamassery.
- **Aksa Jose**, 3<sup>rd</sup> BSc Physics got “A” Grade in clay modeling in M G University Youth Festival“**Article 14**”.

