

SPIE. **STUDENT CHAPTER**

BISHOP MOORE COLLEGE

Annual Report

01 December 2021-30 November 2022



SPIE Bishop Moore College Chapter

Bishop Moore College Mavelikara is an eminent institution among the arts and science colleges in Kerala. The college has been ranked 58th among the colleges in India in the National Institutional Ranking Framework (NIRF) 2022 conducted by the Ministry of Human Resource Development (MHRD). It is an achievement that Bishop Moore College stands first among the affiliated aided arts and science colleges in Kerala. The college is the only one in the top hundred among the colleges in the Alappuzha district. The Kerala State Higher Education Council (KSHEC) has awarded A grade to our college, the first higher education institution in the state to be accredited by the State Assessment and Accreditation Centre (SAAC). It's a great privilege to our institution being a part of an international scientific society. The sanction of student chapter introduced a golden feather to the Bishop Moore College, Mavelikara.

SPIE Bishop Moore College Chapter was established on 30 August 2021. The main aim of our student chapter is to increase the students affinity towards optics and photonics and to develop their future in scientific areas. We like to introduce our student chapter as an entry gate to students to improve their scientific thinking, rational attitude and research ideas. Through SPIE it is sure that they can be able to make a connection with international scientists and researchers. The chapter advisor, mentor and chapter officers are always hardworking to organize wide variety of programs to develop a scientific platform for our students academic growth.



Our 2022 Chapter Officers

Advisor: Dr. Arun Aravind

Mentor: Dr. Saji K.J

President: Arun Raj R S

Secretary: Susmi Anna Thomas

Vice President: Lolly Maria Jose

Treasurer: Nithya S George

Member Roster

Total Student Members: 15

Javeesh Alex

Nayana D A

Jibi Kunjumon

Ayona K Jose

Aruna Joseph

Anjana M P

Sankaran Nampoothiri V

Aleena P A

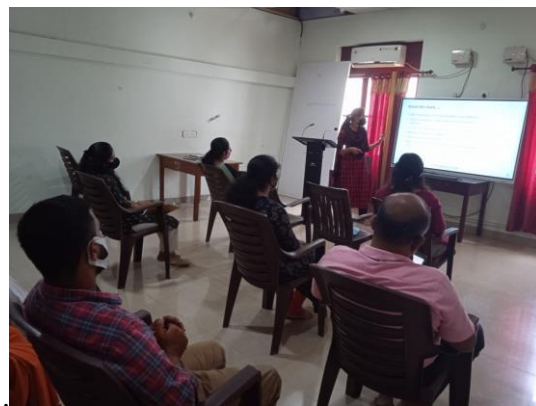
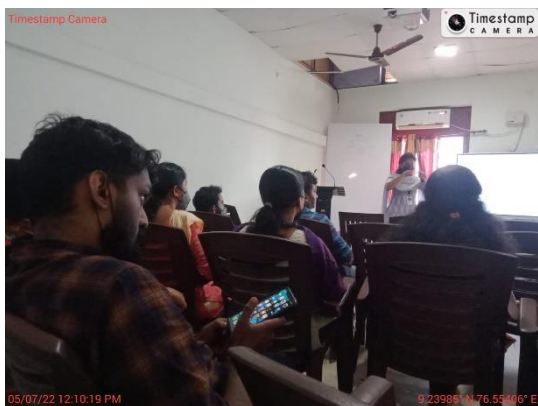
Saji Chandran

Sunil Raj R

Hereby we are presenting our student chapter report from 01 December 2021 to 30 November 2022

Weekly Presentations

The Department of Physics often hosts weekly presentations for research scholars on subjects like photonics, non-linear optics, energy applications, etc. in collaboration with the Bishop Moore College Chapter of SPIE. This weekly presentation's major goal is to help our students present more effectively and ask more probing questions. Faculty members and research mentors consistently make an effort to make it to these presentation times. We started organising these lectures in offline form as of last week, November



Monthly Lecture Series for UG & PG students

For research scholars, UG and PG students, monthly lecture series on topics including optics, photonics, astronomy, biophotonics, etc. were arranged in cooperation with other clubs and NGOs. Members of the SPIE student organisation managed the classes. The series' major goal is to increase graduate students' knowledge, curiosities, and interests in the subjects of optics and photonics so that they can learn more about them. SPIE student chapter hosted eight lectures in this series. The first two lectures in the series were given by Dr. Saji K J, Cochin University of Science and Technology, and Ramesh T. Subramaniam, University of Malaya. SPIE members then gave the remaining courses.

Sl.No	Date	Name of speaker	Topic
1	20/01/2022	Dr Saji k j	
2	10/02/2022	Dr. Ramesh T Subramaniam	
3	01/03/2022	Susmi Anna Thomas	
4	04/05/2022	Aruna Joseph	
5	06/06/2022	Arun Raj R S	
6	14/07/2022	Nithya S George	
7	16/08/2022	Lolly Maria Jose	
8	11/10/2022	Sunil Raj R	



Industrial lab Visit for students

As a part of the curriculum activity in association with SPIE student chapter, for UG and PG students in Department of Physics visited Vikram Sarabhai Space center Trivandrum on 7th October 2022. About 40 students along with SPIE student chapter advisor and department professors visited the place to provide the students a national research lab exposure.



From September 19 to September 25, 2022, St.College Berchman's Changancherry in Kerala hosted SAMVIT 2.0, an all-Indian science and culture exhibition. The Bishop Moore College Mavelikara SPIE student organisation gave the students a chance to participate in the

knowledge explosion. On September 19, 2022, students and teachers visited the event, igniting their interest.



Monthly SPIE members meeting

Members of the SPIE student chapter gathered on a monthly basis. All student members, the adviser for the student chapter, a mentor, and the head of the university attend the meeting to discuss, plan, and carry out the SPIE programmes. Meetings were scheduled at the end of each month, and depending on the circumstance, all members could participate online or in person.

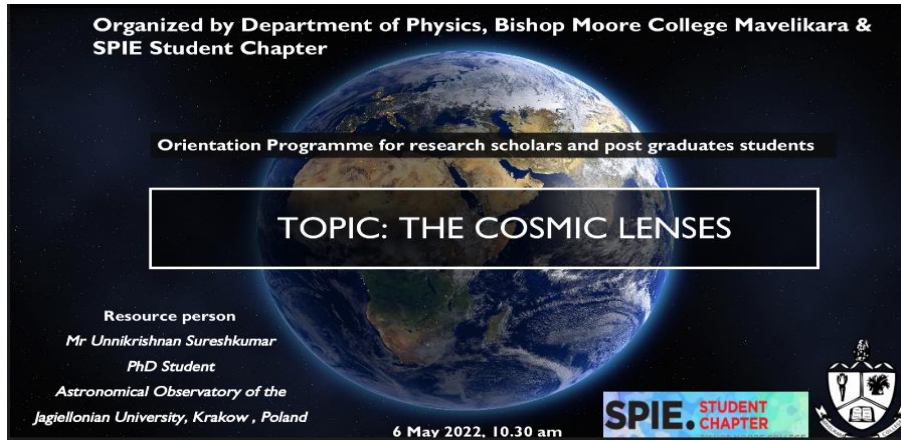


“Meet the scholars” - Orientation Program for students

Meet the scholars program is an interactive session for UG, PG and Research Scholars with former SPIE student members.

- Dr. Unnikrishnan Sureshkumar, Research Scholar, Astronomical Observatory of the Jagiellonian University, Krakow, Poland

In view of the orientation program for research scholars and PG students, Dr. Unnikrishnan lead the class on the topic “ The Cosmic lenses”. About 30 students along with SPIE Bishop Moore College chapter members attended the program. He presented the topic along with PowerPoint presentation on the lab facilities, photos of telescopes and sky view for the students. It is great to know that the class was very much interesting for the attended students.



- Dr. Shree Ranjini Nair, Associate Professor of Physics, University of Incarnate Word, USA
In association with SPIE Bishop Moore College student chapter, an orientation program conducted under the resource person Dr. Shree Ranjini Nair. UG and PG students along with SPIE chapter advisors and student members attended the program. The class focused on optics related research opportunities and themes which will helps the students for their future benefits.

"Education is the mother of leadership"-Wendell Willkie

**ORIENTATION PROGRAMME FOR
RESEARCH SCHOLARS
& POST GRADUATE STUDENTS**

10 June 2022, 10.30 am

Resource Person



Dr. Shree Ranjini Nair
Associate Professor of Physics
University of Incarnate Word, USA
(<https://www.researchgate.net/profile/Shree-Nair-1>)

Organized by

Department of Physics
Bishop Moore College,
Mavelikara &
SPIE Student Chapter



SPIE. STUDENT CHAPTER
BISHOP MOORE COLLEGE

Adobe Stock | 221578652

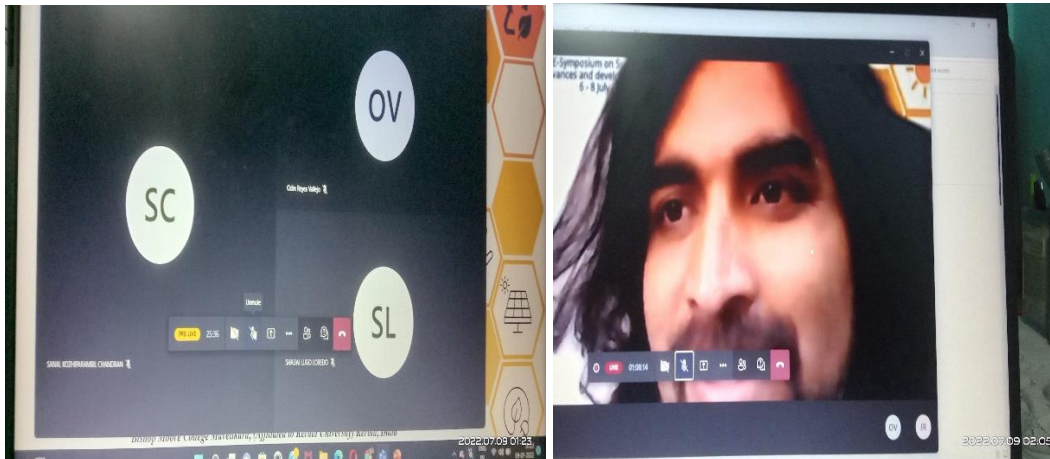


10 Jun 2022 12:05:38
Kallumala Bishop Moore Vidyapith Road
Akkanattukara Vardu
Mavelikara
Alappuzha
Kerala



10 Jun 2022 11:12:3
Kallumala Bishop Moore Vidyapith Roa
Akkanattukara Vard
Mavelika
Alappuzh
Kera

- Dr Anil Kumar Jain from ISRO, conducted public Lecture on Space Technology organized as part of World Space Week 2022, by the Dept of Physics in association with SPIE Bishop Moore College Chapter.
- Dr.Sanal Kozhiparamil Chandran (Assistant Professor, Universidad Autonoma de Nuevo Leon, Mexico) in view of International E symposium at Mexico university invited students to present papers. SPIE student chapter members attended the program along with oral presentation.



Skill/ Carrier development program and talk

In view of skill enhancement and employability development programme in association with physics department and SPIE student chapter, a series program called ‘SEED’ is organized. It provides skill development training to students in relevant areas especially in optics and photonics related field.

A talk on carrier advancement for college students were organized by SPIE student chapter members. The class discussed benefits of international collaborations and SPIE international chapter membership for the future development of students who are in their initial and final stage of degree classes.



Skill Enhancement & Employability Development Programme
A venture of the Physics Association 2022-23

The more we give importance to skill development, the more competent will be our youth.

Skilling with quality

Skilling with relevance

Skilling with outreach

The only way we can end unemployment is through skill development.



Objectives

- Provide skill enhancement training to students in relevant areas.
- Make our students self sustained during their time of study.
- Provide opportunity to students to develop their entrepreneurial skills.
- Give hands on training and prepare them for taking up jobs in future.
- Conduct outreach programmes.
- Develop a student as a multifaceted personality with academic excellence and social commitment.



Skill training helps students jumpstart their career, prepping them up to be viewed as career-ready and employable.

Student Coordinators

Aravind N.Nampoothiri
Revathy Prasad

Faculty Coordinator

Ann Mary Jose



**DEPARTMENT OF PHYSICS
BISHOP MOORE COLLEGE
MAVELIKARA**



**GET A FREE
TICKET TO
EUROPE FOR
HIGHER STUDIES
-TIPS AND TRICKS
TO GRAB ONE**
28/09/2022, 10 AM
@
SEMINAR HALL

**A TALK ON CAREER ADVANCEMENT
FOR COLLEGE STUDENTS**



AARON KURIAKOSE PRAKASH

RECIPIENT OF ERASMUS MUNDUS SCHOLARSHIP

ADMITTED TO ERASMUS MUNDUS JOINT
MASTER DEGREE BIOPHAM COORDINATED BY
THE UNIVERSITY OF LILLE

BSC CHEMISTRY STUDENT,
MADRAS CHRISTIAN COLLEGE, CHENNAI

+ PHYSICS ASSOCIATION 2022-23



On November 23, 2022, Mr. Arun Raj RS, a research student at Bishop Moore College Mavelikara and a member of SPIE, gave a presentation on "Introduction to Origin." The purpose of the event was to educate graduate and postgraduate students on Origin, the data analysis and graphing software. Additionally, practical lessons were provided to familiarise students with the software.

Department of Physics
Bishop Moore College, Mavelikara

Introduction to Origin

Data analysis

Scientific graphing

Industry leading software employed by engineers

About Origin Software

Origin is the data analysis and graphing software of choice for over half a million scientists and engineers in commercial industries, academia, and government laboratories worldwide. Origin offers an easy-to-use interface for beginners, combined with the ability to perform advanced customization as you become more familiar with the application.

Resource Person



Arun Raj R. S.
Research Scholar
Department of Physics
Bishop Moore College, Mavelikara

23/11/2022, 1.30 PM
@ Physics Computer Lab



An initiative of SEED
Skill Enhancement and Employability Development Programme

PHYSICS ASSOCIATION 2022-23

Outreach student program

Talks on photonics and LED applications were conducted with school students as part of a student outreach initiative. The theory, applications, and usage of LED lights were discussed with the student groups by SPIE student members and advisor in light of the start-up programme centred on producing LED lights.



The research arm of the Physics Department, the Centre for Advanced Functional Materials, is always willing to help graduate and post-graduate students from different institutions by offering lab space in conjunction with the SPIE outreach programme. For their project and other research purposes, facilities for synthesis and characterisation are available.

National Science Day Celebrations 2022

National Science Day Celebrations 2022 in association with Physics Association and SPIE Student chapter was conducted on 02 March 2022. Many competitions including Power point presentation and poster design on “Integrated approach in Science and Technology for a Sustainable Future” and talk on “A gaze at the cosmos” was performed.

BISHOP MOORE COLLEGE MAVELIKARA
PHYSICS ASSOCIATION *RESONANCE*

NATIONAL SCIENCE DAY CELEBRATIONS 2022

Topic: **Integrated Approach in Science and Technology for a Sustainable Future**

Intercollegiate Competitions

PowerPoint Presentation
Date: **02 March 2022**

Guidelines:

- Maximum time allotted for a presentation is 7 minutes.
- The presentation should be focused on the given topic

Poster Design
Last Date of Submission: **28/02/2022**

Guidelines:

- Poster should be hand-made
- Size: A3 (297 mm x 420 mm)
- The poster should be focused on the given topic

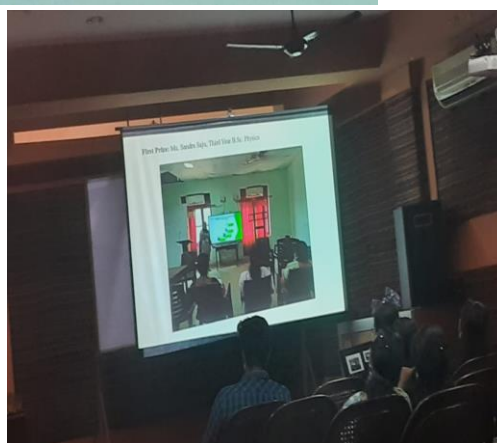
Cash Prizes, Books & Certificates will be Awarded to Winners!!!

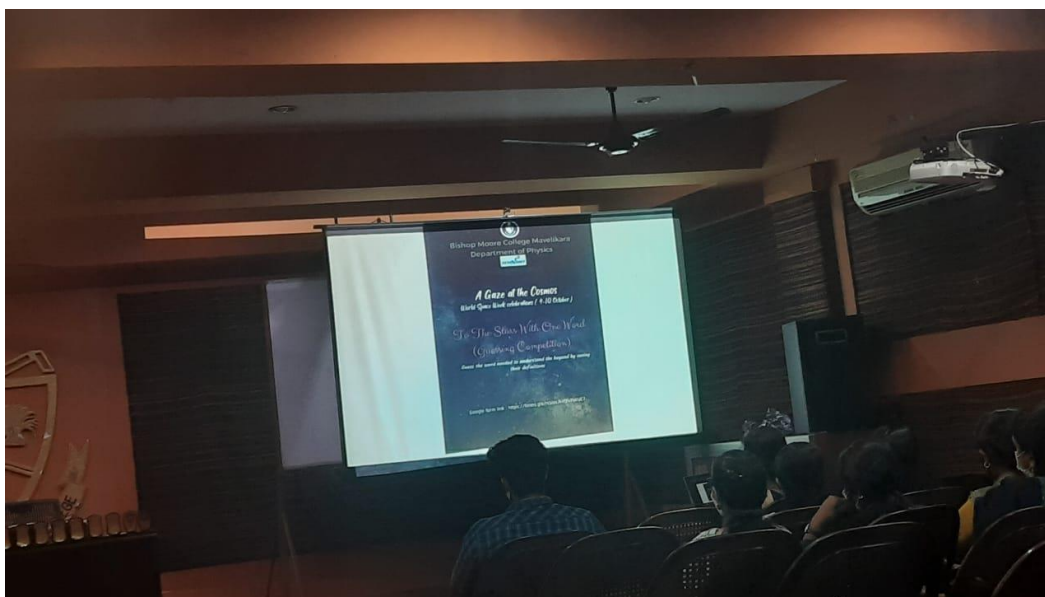
Supported by:

Contact details:
Dr. Jerin Susan John (9496466198)
Ananthus S. (9493130250)

APT ACADEMY OF PHYSICS TEACHERS KERALA

SPIE. STUDENT CHAPTER





Future Plans (Tentative)

- Outreach program incorporating school students and Kudumbasree units involving telescope making, sky view and one day workshop.
- Workshop on making LED stars, torches and decorative lights and its marketing
- One day seminar on the topic “Importance of optics and photonics in everyday life” for school students as a part of International day of light.
- National level program inviting dignitaries regarding the growth of Modern optics and Photonics along with poster and verbal presentations for students from local institutions as well.

Financial Information

Beginning Balance	
Ending Balance	

We believe that through SPIE student chapter we can able to do more activities in the future by incorporating the participation of more students to the chapter. We like to introduce our student chapter as a potential hub to inside and outside college students and research scholar’s inorder to improve their technical and theoretical skills in the area of optics and photonics. We like to encourage our students to participate in different SPIE activities and programs to improve their coordination, critical thinking and reasoning abilities.

We thank the SPIE student chapter community for sanctioning this chapter application. Also, we like to thank our institution, department, chapter advisor, mentor and officers for their corporation and encouragement inorder to execute this chapter in a smooth and successful way.

On behalf of SPIE Bishop Moore College Student Chapter