

# NEWSLETTER



**ST. MARY'S COLLEGE (AUTONOMOUS)**  
**RE-ACCREDITED WITH 'A+' BY NAAC (4TH CYCLE)**  
**THOOTHUKUDI- 628001, TAMIL NADU**  
**PG DEPARTMENT OF PHYSICS**

## MESSAGE FROM THE CO-ORDINATOR



The unquestionable truth that directs our conscience is honesty, which serves as the foundation for trust. We are urged to consider the essential part that honesty plays in our personal and professional lives as we move through this academic year, which is dedicated to the virtue of honesty. The concept of honesty must guide our choices and behaviours, just as the unchanging rules of science regulate the cosmos. Let us remember the truth of the saying, "Honesty is the best policy," in a world when integrity is frequently compromised. This classic saying reminds us that being honest is not a choice; it is a need.

Let's maintain the highest standards of honesty in all of your endeavours during this "Year of Honesty."

Finally, I would like to wish everyone in our department the best of luck and blessings. I hope that this year brings not just academic success but also significant personal development and moral purity. May we be blessed by the Almighty and ensure that everything we do is honest.

With blessings and best wishes,

Ms. P Padmavathi



## EDITORIAL TEAM

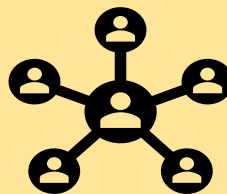
Mrs. P. Padmavathi  
Co-ordinator & Assistant Professor

Mrs. Y. Sasikala  
Assistant Professor

Dr. Antony Dhivya Tharshini  
Assistant Professor

Mrs. A. Nirmala Shirley  
Assistant Professor

Mrs. L. Smila  
Assistant Professor



## ACTIVITIES OF THE ASSOCIATION

Numerous events that have benefited the students have been organized in large part by the Physics Association. In addition to improving the educational experience, these programs have helped the students develop a feeling of belonging and solidarity.

### PHYSCOM 2019

On 07.08.2019, the interschool quiz competition PHYSCOM 2019 was organised by the Department of Physics, 12 schools were participated. 5 teams were selected for the final round. Alagar Public School, The Vikasa school and B.M.C. Metric Higher Secondary School won the 1st, 2nd and 3rd places respectively.



## **A ONE DAY LECTURE CUM HANDS ON TRAINING ON “CRYSTAL GROWTH”**

On 6th December 2019, a One Day Lecture cum Hands on training on “Crystal Growth” was organised by the Department of Physics. The initial session was adorned Dr. P. Rajesh, Assistant Professor of Physics, SSN College of Engineering, Chennai. In the training session, students were taught how to prepare a solution for crystal growth, in appropriate ratio and in proper concentration by the research scholar’s of Dr. P. Rajesh .



## **A GUEST LECTURE ON “ELEMENTARY PARTICLES”**

On 9th December 2019, a guest lecture on “Elementary Particles” was organised by the Department of Physics, St. Mary’s College (Autonomous), Thoothukudi. Dr. P. Jebaraj Devadason, Head and Associate Professor of Physics, Pope’s College (Autonomous), Sawyerpuram was the resource person.



## **GUEST LECTURE ON TENSORS**

A one day Lecture on “Tensors” on 13 th December 2019 was conducted by the Department of Physics (SSC) ,St. Mary’s college (Autonomous), Thoothukudi. Dr. B. Selvaraj, Dean of Research, Nehru Institute of Technology, Coimbatore was the resource person.



## **NATIONAL WEBINAR ON “HOW TO USE OPEN EDUCATIONAL RESOURCES TO DESIRE”**

National Webinar on “How to use open educational resources to desire” was organised by the PG Department of Physics on 31.05.2020. Dr. P. Murugan, Assistant professor in school of management studies, University of Hyderabad, Hyderabad was the resource person.

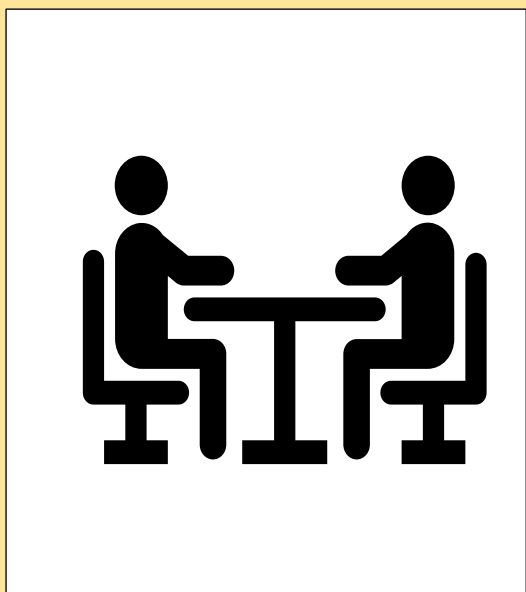
## **LAB ACTIVITIES**

In order to give students practical experience in experimental physics, the department has carried out 59 lab activities. Through these activities, they have developed a spirit of scientific inquiry and exploration in addition to honing their practical skills.

## **MENTOR-MENTEE SYSTEM**

With 9 and 16 students in their first and second years respectively, benefiting from the direction and assistance of seasoned faculty members, the Mentor-

Mentee System has been a huge success. This project has produced a supportive atmosphere that fosters innovation, creativity, and academic progress.



S.No	Date
ODD	12.07.19
	19.07.19
	09.08.19
	16.08.19
	13.09.19
	27.09.19
	04.10.19
EVEN	29.11.19
	06.12.19
	20.12.19
	24.01.20
	07.02.20
	21.02.20
	28.02.20
06.03.20	
13.03.20	

## BOARD OF STUDIES

The Board of Studies meeting, held on 01.02.2020, was attended by 3 external experts namely Dr. J. Jebaraj Devadasan, Dr. A. Effie Cordelia and Dr. Ada Vinolin and the department has successfully implemented the Choice-Based Credit System (CBCS) and Outcome-Based Education (OBE) framework. This has ensured a student-centric approach, flexibility, and accountability in the academic programme.



## PTA

The Parent-Teacher Association meeting, held on 08.02.2019 and 17.08.2019 for the students of I and II years respectively has provided a platform for parents to engage with the department, share experiences, and forge meaningful connections.

## STAFF ACTIVITIES

### Number of Professional Development Programmes Attended by the Faculty

Year	No. of Faculty	FDP	Short Term Course	Refresher Course	Orientation Programme	SWAYYA/ NPTEL/ EDX/ Coursera
2019 - 2020	5	10	1	-	1	2 (NPTEL)

### Number of Papers Presented by the Faculty

Year	No. of Faculty who Presented Papers	Total No. of Papers Presented by the Faculty
2019 - 2020	4	9

Ms. P. Padmavathi received “Best Paper Presentation Award” in International E-conference held at Shardha University, Greater Noida, 2020

### Number of Papers Published by the Faculty

Year	No. of Faculty who Published Papers	No. of Faculty who Published papers in			Total No. of Publications
		UGC Care List	Web of Science	Scopus	
2019	1	2			2

## **A ONE DAY FACULTY TRAINING PROGRAMME ON “SOLAR CELL TRAINER INSTRUMENT”**

On 7th January 2020, a One Day Faculty Training Programme on “Solar Cell Trainer Instrument” was organised by the Department of Physics with the participation of 15 faculty from Physics and chemistry departments.



### **STUDENT ACTIVITIES**

- ❖ Students of I M.Sc., and II M.Sc Physics, participated in a one day International conference, “Advanced materials” on 26<sup>th</sup> of August 2019 conducted by the department of Physics, Adhithanar College of Arts and Science, Thiruchendur.
- ❖ Students of I M.Sc., and II M.Sc Physics, participated in a two day workshop, “Google tools for Science Aspirants” on 18<sup>th</sup> and 19<sup>th</sup> September 2019, conducted by the Marian Research forum of St. Mary’s college (Autonomous), Thoothukudi.



- ❖ Students of II M.Sc physics attended a One day IQAC sponsored workshop, “Writing and publishing research articles - A strategic approach” on 1<sup>st</sup> October 2019, organized by IQAC team, Kamaraj College, Thoothukudi.



- ❖ Ms. Anushya J, Ms. Redeema Fernando R and Ms. Uma Maheswari .M visited the Book Fair on 9<sup>th</sup> October 2019 organised by Book Sellers Publishers of South India (BAPASI) near New Bus stand.
- ❖ Students of I and II M.Sc Physics visited a Mega Space Expo organised by V.O.C College, Thoothukudi in association with ISRO Propulsion Complex Mahendragiri on 9<sup>th</sup> October 2019.





- ❖ Students of II M.sc Physics S. Mary George Shemona & D. Monika attended a certificate course on “Analytical Techniques” on 27.11.2019 to 30.11.2017 Avinashi Lingam University, Coimbatore.
- ❖ Students of I M.Sc., Physics, participated a “One day Lecture cum Hands on Training on Crystal Growth” on 7<sup>th</sup> December 2019, conducted by the Department of Physics, St. Mary’s college (Autonomous), Thoothukudi.



- ❖ Students of I M.Sc Physics, participated a “One day Lecture on Elementary Particles” on 9<sup>th</sup> December 2019, conducted by Marian Star Centre, the Department of Physics, St. Mary’s college (Autonomous), Thoothukudi. Dr.P.Jebaraj Devadasan, Head & Associate Professor of Physics, Pope’s college, Sawyer Puram.



- ❖ K.Stella piona leon & M.Joseil Majorae of II M.Sc., attended Presented papers in an International conference on Advanced Materials and their applications on 13.12.2020 conducted by the Department of Physics ,V.O.C College , Thoothukudi.



- ❖ Students of I M.sc., & II M.Sc., participated a one day Lecture on “Tensors” on 13 th December 2019, conducted by the Department of Physics(SSC) ,St. Mary’s college (Autonomous), Thoothukudi.



- ❖ Students of I M.Sc Physics, participated a one day Lecture cum training on “ Bottom up approaches” on 17 th December 2019, conducted

by the Department of Physics , St. Mary's college (Autonomous), Thoothukudi.

- ❖ Students of I & II M.Sc., attended an association meeting on Solar Trainer Kit on January 07.01.2020 conducted by the Department of Physics , St. Mary's college (Autonomous), Thoothukudi.
- ❖ Students of I & II M.Sc., attended a National Seminar on “Innovation in Methodology-A path for Outcome Based Research” on 20.01.2020 under Research Enhancement Initiative (2019-2020) organised by Marian Research Forum, St. Mary's College (Autonomous), Thoothukudi.
- ❖ S.Epsiba & A.Maria siluvai steffi of II M.Sc., & Konsha of I M.Sc., participated in PHYSCOM 2019-2020 on January 22.01.2020 conducted by the Department of Physics, St.Xavier's College (Autonomous), Palayamkottai,Tirunelveli-627002.
- ❖ Students of I & II M.Sc., attended a National Seminar on “Colourful NanoWorld “on 23.01.2020 under Star College Program , conducted by the Department of Physics , St. Mary's college (Autonomous), Thoothukudi. Dr. Anushree Roy, Department of Physics, Indian Institute of Technology, Kharagpur - 721302 & Dr.V.Vasu , Department of Physics, M.K.University, Madurai were the resource persons.
- ❖ Students of I & II M.Sc., attended an motivational talk on carrier guidance in research conducted by the Department of Physics , St. Mary's college (Autonomous), Thoothukudi. Dr.Laxmi Shanker Iyer & Dr.Kundhavai Nachiyar were the Resource persons.
- ❖ Students of I & II M.Sc., attended a International Conference on “Advanced Materials” on 30.01.2020 & 31.01.2020 under Star College Program , conducted by School of Physical Sciences, St. Mary's college (Autonomous) Thoothukudi.

- ❖ M.Josphine Gladiya of II M.Sc., presented a paper on, "The Instabilities driven in Electron Density and Temperature of the solar wind over the intense solar Activity"& U.Manimegalai presented a paper on , "Comparative flims analysis of ZnS and ZnSe Thin films by SILAR method. In the International Conference on "Recent Trends in Multi-Disciplinary Research on 27 th & 28<sup>th</sup> February ,2020 held at A.P.C Mahalaxmi College for Women,Thoothukudi,



### **FIELD PROJECT/INTERNSHIP/PROJECTS**

<b>Year</b>	<b>No. of Field Projects</b>	<b>No. of Internships</b>	<b>No. of Projects</b>
<b>2019 - 2020</b>	<b>9 (I M.Sc)</b>	<b>03</b>	<b>16 (II M.Sc)</b>

### **E CONTENTS**

Our department staff members have produced 3 e contents to enhance the learning ability of the students.

## EDUCATIONAL TOUR/ IV REPORT

- ✚ AVM Hospital
- ✚ Thermal Power Plant
- ✚ Railway station
- ✚ Science centre

- ✚ Students of II M.Sc Physics went for field Visit to the Science Centre, Tirunelveli on 6<sup>th</sup> of September 2019.



- ✚ Students of I M.Sc Physics went for field visit on 11.12.2019 to A.V.M Hospital, Thoothukudi.



✚ Students of I M.Sc Physics went for field visit on 16.12.2019 to Railway station ,Thoothukudi.



✚ Students of I M. Sc Physics went for field visit on 18.12.2019 to Thermal Power Plant, Thoothukudi.



## **NO. OF PROJECTS**

16 projects have been completed by II M. Sc students , demonstrating their research work and problem solving skills.



## **PASS PERCENTAGE**

100% results have been achieved for the year 2019-2020.



## HIGHER EDUCATION

5 Students have enrolled themselves for B.Ed.



## PLACEMENT

J Anushya has been placed in Das Navis Matha Girl's Higher Secondary School.

## MOOC COURSE

Konsha C and Venkateswari G have successfully completed the NPTEL course on Solid State Physics



7 students did a course on Soft nano Technology.

We congratulate all the students for their hard work and success in these endeavours, and we look forward to their continued growth and achievements in the future.