



ST.MARY'S COLLEGE(AUTONOMOUS)

THOOTHUKUDI

PG PHYSICS NEWSLETTER

2023 - 2024

Editorial Team

Dr.A.Nirmala Shirley Ph.D.,

Co-ordinator

&

Assistant Professor

Dr.P.Padmavathi Ph.D.,

Assistant Professor

Dr.S.Irudaya Sahaya Lancy Ph.D.,

Assistant Professor

Ms.S.Thangeswari Ph.D.,

Assistant Professor



It gives me great pleasure to share this message for our annual Physics Department Newsletter. This publication serves as a platform to celebrate our academic achievements, innovative research, and collaborative spirit, which continue to drive the growth and reputation of our department.

The past year has been remarkable for us. Our faculty and students have contributed significantly to cutting-edge research, with numerous publications in prestigious journals and active participation in national and international conferences.

I extend my heartfelt gratitude to the faculty for their unwavering dedication, to the students for their enthusiasm and hard work, and to our alumni and collaborators for their continued support and inspiration.

As we move forward, let us continue to strive for excellence, encourage innovation, and embrace the challenges of this ever-evolving field. Together, we can illuminate the path to discovery and contribute meaningfully to the scientific community.

Wishing you all a fruitful and inspiring year ahead.

Warm regards,

Dr.A.Nirmala Shirley

Co-Ordinator

Physics(SSC)

Activities of Physics Association

- On 30th June 2023, the business meeting was conducted to elect the office bearers of the Physics Association under the guidance of department faculty members. Ms. A.Lourdu Ladis Selsiya of II PG, Ms.R.Geethapriya of I PG and Ms.D.J. Jasmine of II PG were elected as president, vice president and secretary respectively
- An association meeting was organized on 19.07.2023 on the topic "Women in Physics". Dr. S.Lincy Mary Ponmani, Assistant Professor of Physics, Sara Tucker College, Tirunelveli was the resource person
- On 7.12.2023 and 8.12.2023, Two day lecture cum hands on training on "A Step By Step Guide for preparing and Characterising Recent Research Materials Dr. Sumithraj was resource person
- On 23. 08. 2023 quiz competition was organized by the department of Physics. The quiz competition was organized for the higher secondary school students from various schools in and around Thoothukudi

Faculty Awarded with Ph.D

- Dr. P. Padmavathi has been awarded Ph.D., degree on 04.09.2023 for her thesis entitled " THERMO- ACOUSTICAL PROPERTIES OF BINARY LIQUID MIXTURES AT VARIOUS TEMPERATURES".
- Dr. S. Irudaya Sahaya Lancy has been awarded Ph.D., degree on 29.09.2023 for her thesis entitled " THERMODYNAMICAL BASED LIQUID MIXTURES CHARACTERIZATION USING ULTRASONIC TECHNIQUES

". Dr. P Padmavathi has given an invited talk on the topic "**Frontiers of Ultrasonic Technology in Research and Applications**" on 11.09.2023

BOOK CHAPTERS PUBLISHED

- Dr.P.Padmavathi and Dr. S Irudaya Sahaya Lancy have published chapters entitled "Synthesis and Studies of TTAHOT: Macro, Micro and Nano Crystalline Composite for Electronic and Bio-Medicinal Use"
- Dr.P.Padmavathi has published a chapter entitled "Growth and Characterizations of Red Bromide: The Pleochroism Based Crystals for Bio-Medicinal, Electronic and Mechano Uses".
- Dr.A Nirmala Shirley has published a book on the title "Synthesis and Characterisation of ZnS Thin Films By Nebulizer Spray Pyrolysis For Solar Cell Applications" with ISBN number 978-93-94428-66-9.

Dr. S. Irudhaya Sahaya Lancy gave a lecture on the topic "Introduction to Nanotechnology" in the Inservice Training Programme conducted by Department of Physics for school teachers on 29.01.2024

Board of Studies

The Board of Studies (BoS) serves as the academic backbone of the institution, responsible for designing and updating the curriculum to align with the latest advancements and industry needs. Comprising faculty members, industry experts, and alumni, the BoS ensures that programs are rigorous, relevant, and innovative. It plays a key role in maintaining academic standards, reviewing course content, and introducing new methodologies to enhance the quality of education, preparing students for dynamic career opportunities.



Mentor-Mentee system

The Mentor-Mentee system is designed to foster a supportive and nurturing environment for students. Under this initiative, each student is paired with a faculty mentor who provides personalized guidance on academic, career, and personal development. This system encourages open communication, helps address challenges, and ensures students receive the support they need to thrive. By bridging the gap between faculty and students, the Mentor-Mentee system plays a vital role in enhancing the overall learning experience and creating a sense of Belonging within the institution

| Semester | Date |
|----------|--|
| ODD | 15.07.2023, 23.09.2023, 06.10.2023 |
| EVEN | 20.01.2024, 27.01.2024, 03.02.2024, 02.03.2024, 09.03.2024, 16.03.2024, 23.03.2024, 06.04.2024, 13.04.2024 |



Student's Activities

- Subetha A, Buddha Kanya B, Trinisha S and Shanmathi K of II PG Physics participated in National seminar on “Artificial Intelligence (AI) tools for Education with special reference to chat GPT, GPT 4 & Lamma, Library Committee & IIC with SALIS Tirunelveli Chapter” on 11.08.2023
- Ms. A Mary Miraculine and Ms. D Simona have presented a paper on the title “Fusion Power Generation” at Xavier’s College (Autonomous), Palayamkottai on 22.09.2023
- Ms. A Mary Miraculine, Ms. D Simona and Ms. B Breezy of I M.Sc Physics presented papers in the International Conference on “Recent Advancements in Materials Science and Nuclear Energy Research” conducted by Department of Physics, Government Arts and Science College, Kovilpatti in association with Indian Association for Crystal Growth, Chennai.



INDUSTRIAL VISITS

- I AND II PG STUDENTS VISITED TUTICORIN AIRPORT ON 01.07.2023
- PG STUDENTS VISITED KODAIKANAL SOLAR OBSERVATORY, KODAIKANAL ON 16.10.2023 AND 17.10.2023
- OUR STUDENTS HAVE VISITED INDIAN INSTITUTE OF SCIENCE, BENGALURU ON 27.02.2024 AND 28.02.2024



Lab Activities

Lab activities enhance analytical skills and encourage innovation by providing hands on experience in experimental design, data collection interpretation. They also prepare students for research and industrial challenges. The department has spent nearly 120 hours in laboratory

Parents Teacher's Association

The Parent-Teacher Association meeting held on 06.02.24 and 15.02.24 for the students of I and II years respectively has provided a platform for parents to engage with the department, share experiences, and for the meaningful connections.

MooC Courses

I PG students has successfully completed the MOOC courses solid state physics, nuclear and particle physics, basic algebra and biophotonics as a part of the curriculum and secured good score.

Library visit

Our students energetically visits the library oftenly to explore their knowledge

