

ST. MARY'S COLLEGE (AUTONOMOUS)

(Re-accredited with 'A+' Grade by NAAC - 4th Cycle)

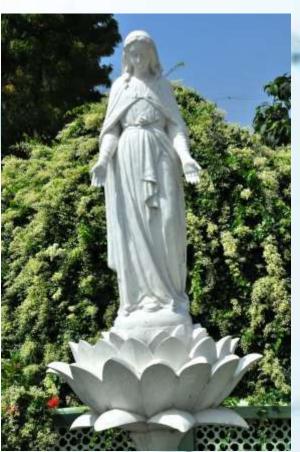
Thoothukudi-628001, Tamil Nadu, India

(Affiliated to Manonmaniam Sundaranar University)

PG Department of Chemistry

NEWSLETTER

Academic Year 2022-2023



EDITORIAL TEAM

Dr. J. Antony Rajam

Coordinator & Assistant Professor of Chemistry

Dr. C. Zozimus Divya Lobo

Assistant Professor of Chemistry

Ms. D. Carolin Jeniba Rachel

Assistant Professor of Chemistry

Ms. R. Pratheeba

Assistant Professor of Chemistry

HOD'S MESSAGE

Dear Students and Faculty of the PG Department of Chemistry,

I am very glad to share the latest updates and achievements from our department. With four dynamic and dedicative faculty members in the department, we offer great exposure to the learners for exploring new ideas in research and recognizing opportunities in various fields.

- Our Department in collaboration with Marian Research Forum is providing Research Consultancy.
- Our Department conducted an online workshop with PG department of Computer Science, an international symposium with Regular Department and 2 programmes with Institution's Innovation Council.
- Our students have presented their papers in International conference.
- Our students have shown outstanding performance in MooC exams with Elite grade, further enhancing their skills and knowledge.
- Our students published 8 book chapters in a book with ISBN.
- One of our students has won the Second prize in e-Poster competition conducted by Marian Research Forum, St. Mary's College (Autonomous), Thoothukudi.
- One of the students has been awarded the 'Best Paper Presentation' in Conference on "Research Publication: An Integrative and Dynamic Approach" organized by Marian Research Forum, St. Mary's College (Autonomous), Thoothukudi.
- Our staff members have acted as Project evaluator and Judge for Poster presentation.
- Our staff members have served as Judge for Poster presentation in International Conference and Project evaluator for the school students' science project.
- Our staff members have published four book chapters in a book with ISBN.
- Our faculty members have presented and published papers at prestigious conferences and in reputed journals, contributing significantly to academic discourses.

I extend my heartfelt congratulations to all our students and faculty for their achievements. Let us continue to strive for even greater heights in the upcoming years.

Thank you for your cooperation and support.

Warm regards,

Dr. J. Antony Rajam

Coordinator and Assistant Professor

DEPARTMENT ACTIVITIES

PG Department of Chemistry in collaboration with Marian Research Forum is providing Research Consultancy.

On 9th October 2022, the PG Department of Chemistry at St. Mary's College (Autonomous) organized an association meeting on "Molecular Docking for Drug Design." The session was led by Dr. Caroline Daisy, Assistant Professor from the Department of Chemistry at Pope's College (Autonomous), Sawyerpuram, Thoothukudi. The program provided insights into molecular docking as a pivotal tool in drug design and was attended by 12 students and 4 staff members.

On 12th November 2022, an online workshop titled "How to Write and Publish an Academic Research Paper" was conducted by Dr. S. Albert Alexander, a Professor in the Department of Electrical & Electronics Engineering at Kongu Engineering College, Perundhurai. The workshop 93 participants was attended by comprehensive guidance on academic writing and publication.

On 3rd February 2023, another association meeting on "Electrochemistry in Day-to-Day Life" was conducted by Dr. C. Vedhi, Assistant Professor in the PG & Research Department of Chemistry at V.O. Chidambaram College, Thoothukudi. The session highlighted the practical applications of electrochemistry in daily life and was ate

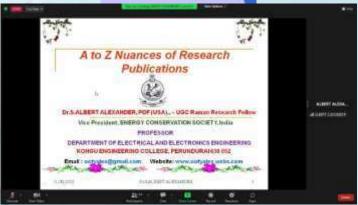
nded by 12 students and 4 staff members.

On 18th March 2023, an international symposium on "Smart Materials" brought together eminent speakers, including Dr. S. Veerapandian from POSTECH University, Korea, Dr. M. Mahendran from Thiagarajar College of Engineering, Madurai, and Dr. Antony from Mepco Schlenk Engineering College, Sivakasi. The event was attended by 197 participants and provided a platform for discussing advancements in smart materials.













CHEMISTRY LABORATORY

The chemistry laboratory helps students to develop essential skills such as handling glasswares with precision and care. It trains them to use heating tools while observing chemical reactions. Students learn to measure and mix chemicals accurately and to improve their analytical and observation skills. The lab environment emphasizes the importance of safety practices, such as wearing goggles and gloves, handling spills and using first aid when necessary. Through hands-on experiments, students build confidence in following protocols, troubleshooting issues and applying theoretical knowledge to practical scenarios.

MENTOR MENTEE SYSTEM

The system is a move towards Student Support and Progression. It supports to achieve holistic development of every student in the department. A teacher has a group of students whose academic and other aspects of their progress are her concern. The teacher takes care to concentrate more on issues related to their psychological needs during periodical Tutor- Ward Meet each Friday from 2. 30 p.m. to 4.00 p.m. A record of academic results and bio-data of each of the students is maintained.

Semester	Date
	12.08.2022
	02.09.2022
	09.09.2022
	16.09.2022
ODD	13.09.2022
ODD	07.10.2022
	14.10.2022
	21.10.2022
	28.10.2022
	11.11.2022
	06.01.2023
	27.01.2023
	03.02.2023
EVEN	10.02.2023
	17.02.2023
	10.03.2023
	17.03.2023

BOARD OF STUDIES

The Board of Studies Meeting of the P.G. Department of Chemistry was conducted on 24th April 2023 at 10.00 a.m. in the Department of Chemistry. The subject experts of the board were Dr. S. Radha, Assistant Professor of Chemistry, Saiva Bhanu Kshatriya College, Aruppukottai, Virudhunagar District and Dr. S. Jemima Balaselvi Juliana, Associate Professor of Chemistry, The American College, Madurai, the university nominee was Dr. Srinivasan, Assistant Professor of Nagarajan Chemistry, Manonmaniam Sundaranar University, Tirunelveli, the alumna representative was Dr. S. Priya @ Velammal, Assistant Professor of Chemistry, V.O.Chidambaram College, Thoothukudi and the industrial expert was Dr. P. Karpagavinayagam, Assistant Environmental Engineer, DCW Ltd., Sahupuram, Thoothukudi. The Syllabus was designed in the pattern of Outcome Based Education with Choice Based Credit System. The board acknowledged and approved the set pattern.

PTA & ALUMNAE MEET DATES

The Parents Teachers Association conducted meetings regularly for all the parents and students of the department. The meetings were held respectively II M.Sc. on 17.09.2022 for I M.Sc. on 21.01.2023. The Marian Alumnae Meet was organised in commemoration of the Platinum Jubilee celebration on 11. 03. 2023. Rev. Sr. Dr. S. Decla Mary, OSM, Superior General, Servite Generalate, Chennai was the chief guest.





FACULTY RESEARCH AC TIVITIES

Name	Paper - Journal	Paper - Proceedings	Publication Chapter	Patent	Con fere nce	Seminar or Webinar	Worksh op	FDP
Dr.J. Antony Rajam	1	2	2	3	1	3		5
Dr.C.Zozimus Divya Lobo						1	1	
Ms.D.Carolin Jeniba Rachel		6	2	,0	3	3		2
TOTAL	1	8	4	3	4	7	1	7

RESOURCE PERSON

Name	Programme	Role	Date
Dr. J. Antony Rajam	30 th National Children's Science Congress 2021 (State Level)	Project Evaluator	10.12.2022 & 11.12.2022
	International Seminar on Advanced Materials and Their Applications	Judge for Poster presentation	25.01.2023
D. Carolin Jeniba Rachel	30 th National Children's Science Congress 2021 (State Level)	Project Evaluator	10.12.2022 & 11.12.2022
R. Pratheeba	30 th National Children's Science Congress 2021 (State Level)	Project Evaluator	10.12.2022 & 11.12.2022

HONOURS & AWARDS

Dr. J. Antony Rajam received "Research Excellence Award" by Thannammal Educational Trust on 15th September 2022.



IIC conducted two programmes this year.

On 30th August 2022, an IIC conducted an online webinar on the topic "Entrepreneurship in Marine Products," led by Dr. B. Ganesan, the Head and Assistant Professor of the Department of Fish Processing Technology, Fisheries College and Research Institute, Thoothukudi. The session saw the participation of 164 individuals who gained valuable insights into entrepreneurship in the marine industry.

IIC





On 18th November 2022, an IIC meeting featured a motivational session titled "My Story," presented by Mr. Abishek Benjamin, the Director of Abi Macroons and Abi Technochem Pvt. Ltd. The session highlighted his journey as a successful innovator and was attended by 162 participants, who found it highly inspiring.





STUDENTS ACTIVITIES

During the academic year 2022-2023, the students demonstrated exceptional performance across various co-curricular, extra-curricular and sports competitions and events at different levels. Here's a detailed account of their achievements:

Five students have participated in All India book of records America Muthamil World record on the topic "Multilingual Thirugural world record programme" organized by Manitham vihaipom INT.TV on 9th September 2022.

INTERNSHIP

Seven students have participated in Virtual internship program on the topic "Biotechnology" organized by Department of Biology and Microbiology, Sacred Heart College (Autonomous), Thirupattur from 8th to 17th July 2022.

SEMINARS & WEBINARS

Students participated in a variety of seminars and webinars held from June 2022 to May 2023. These included state, national and international level events covering topics such as Nanomaterials, Computational Chemistry, Women Entrepreneurship and start-up ideas, spectroscopy and Cyber Security. Key events included:

- Doped Nanomaterial and Nanoclusters 10th August 2022
- Nanomaterial and Computational Chemistry on 17th August 2022
- Visible Light Active Materials for Photo Electro Chemical Water Splitting on 24th August 2022
- Startup Company it's Legal Issues and Ethics on 30th August 2022
- Women Entrepreneurship and Innovation on 15th October 2022
- Modern Trends in Chemistry on 20th October 2022
- Write Your Thesis using Mendeley on 6th February 2023
- Mental Health through Cyber Security & Safe Social Media on 8th February 2023
- Breaking Barriers in Science Metal Catalyzed Oxidation as a Platform for Hydrogen Storage Material on 14th February 2023





WORKSHOP

Students attended several workshops aimed at skill development and career planning, including: Skill-Based Training Workshop (January 29-30, 2021), organized by St. Ignatius College of Education.

OUIZ

N. Amala Jothi Nirosha have participated in National quiz on the topic "Cake and Bakes" Department of Chemistry, St. Xavier College (Autonomous), Palayamkottai on 22nd January 2023.

PAPER PRESENTATION

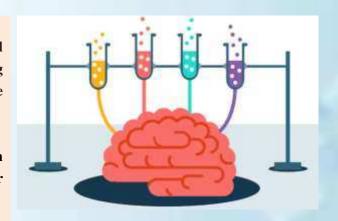
Conferences provided students with opportunities to engage with experts and researchers. Our students

- II PG students have presented their research work in International Conference on "Recent Advancements in Chemical Sciences & IPR-RACSIPR'23" organized by A.P.C. Mahalaxmi College for Women, Thoothukudi on 24th March 2023 and published their articles in proceedings with ISBN.
- 2. S. Ponselvi of II M.Sc. Chemistry was awarded a 'Best Paper Presentation' in Conference on "Research Publication: An Integrative and Dynamic Approach" organized by Marian Research Forum, St. Mary's College (Autonomous), Thoothukudi on 19th April 2023.

PUBLICATION

Eight students under the guidance of three staff members have published 8 chapters in the book with ISBN titled "Impact of COVID-19 on Human Health and Nature".

These achievements reflect our students' dedication and excellence across various domains including academic competitions, cultural events, and sports activities. The success in events ranging from district to state level demonstrates the comprehensive development and competitive spirit of our students.







MOOC & NPTEL

The students of I & II M. Sc. Chemistry attended MOOC course titled, Biological Inorganic Chemistry with subject code noc22-cy52 in the duration of 12 weeks (July - October 2022).

	1000		
S. No	Register No.	Name of the Students	Percentage
1	20SPCH01	Agnes Mary M	64 (Elite)
2	21SPCH02	Ashmitha K	69 (Elite)
3	21SPCH03	Jemima P	67(Elite)
4	21SPCH04	Munieshwari T	70 (Elite)
5	21SPCH06	Ponselvi S	66 (Elite)
6	22SPCH01	Sr. Amala Jothi Nirosha N	58
7	22SPCH02	Arockiya Mashina J	63 (Elite)
8	22SPCH03	Deliciya R	70 (Elite)
9	22SPCH06	Suriya C S	70 (Elite)

PG PROJECTS

A total of five post graduate students of II M.Sc. Chemistry submitted the projects. The details are as follows:

S.No.	Reg. No.	Name	Project Title
1	21PCHC01	Agnes Mary M	Synthesis and Characterization of Novel Mortia-Baylis Hillman Complexes and its Application
2	21PCHC02	Ashmitha K	The Molecular Docking Analysis of Antihypertension Diuretic
3	21PCHC03	Jemima P	Synthesis and Characterization of Bioplastic from <i>Oryza sativa L. Indica</i> and <i>Setaria italica</i>
4	21PCHC04	Munieshwari T	An Inhibition Study of Hypertension α - Blockers using Molecular Docking.
5	21PCHC06	Ponselvi S	Comparative of Green Synthesised Hydrogels, its Characterization and Antibacterial Activity



Pass percentage 95.91%

PLACEMENT

Ponselvi S has placed as 'Junior Chemist' in Kalpaka Chemicals Pvt. Ltd., Nainarpuram, Thoothukudi with package of Rs. 15,000/- per month.

