

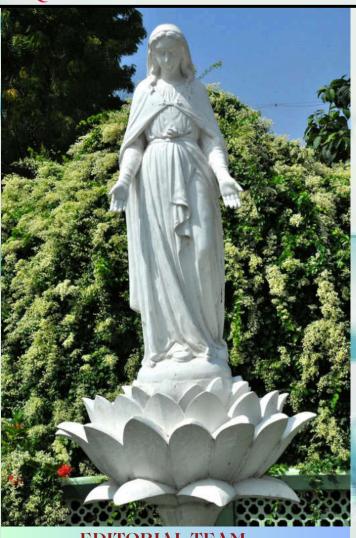
# ST. MARY'S COLLEGE (AUTONOMOUS)

RE-ACCREDITED WITH 'A' GRADE BY NAAC THOOTHUKUDI- 628001, TAMIL NADU

# PG DEPARTMENT OF CHEMISTRY

NEWSLETTER

Academic Year 2018-2019



## **EDITORIAL TEAM**

Dr. J. Antony Rajam Coordinator & Assistant Professor of Chemistry

Dr. C. Zozimus Divya Lobo Assistant Professor of Chemistry

Ms. K. Saravanadevi
Assistant Professor of Chemistry

Ms. D. Carolin Jeniba Rachel 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 students have visited CSIR-CECRI at CSIR-Central Electrochemical Research Institute, Karaikudi.
- Our students have presented their papers in various conferences and seminars.
- One of the students has published her paper in reputed journal.
- One of our staff members has served as a Convener for the Viva-Vice Examination for the Elementary School Teachers of Thoothukudi and Ramanathapuram Districts under the programme PDPET launched by National Institute of Open Schooling (NIOS) directed by MHRD.
- 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 achieve for even greater heights in the upcoming years.

Thank you for your cooperation and support.

Dr. J. Antony Rajam
Coordinator and Assistant Professor

Warm regards,

# **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 purports 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	Semester	Date	
ODD	13.07.2018		30.11.2018	
	27.07.2018	1 2	07.12.2018	
	03.08.2018		14.12.2018	
	10.08.2018	TO THE ST	21.12.2018	
	24.08.2018		18.01.2019	
	31.08.2018	EVEN	01.02.2019	
	14.09.2018		08.02.2019	
	28.09.2018		23.02.2019	
	05.10.2018		02.03.2019	
	12.10.2018		08.03.2019	
	26.10.2018		08.03.2019	

### **BOARD OF STUDIES**

The Board of Studies Meeting of the P.G. Department of Chemistry was conducted on 16th February 2019 at 10.30 a.m. in the Department of Chemistry. The subject experts of the board were Dr. S. Joseph Selvaraj, Associate Professor of Chemistry, St. Joseph's College (Autonomous), Trichy, Dr. R. Murugesan, Associate Professor of Chemistry, TDMNS College, Kallikulam, Tirunelveli and Dr. J. Sidharthan, Associate Professor of Chemistry, V.O.C College, Thoothukudi, the university nominee was Dr. K. Swarnalatha, Associate Professor of Chemistry, Manonmaniam Sundaranar University, Tirunelveli and the alumna representative was Dr. J. Rajula Jasmine Usha, Associate Professor of Chemistry, Sarah Tucker College (Autonomous), Tirunelveli and the industrial expert was Mr. D. Kishore, Assistant Manager, Urea Production, SPIC, 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 11.08.2018 and 28.03.2019 and for I M.Sc. on 08.02.2019. The Marian Alumnae Meet was organised on 02. 03. 2019. The Chief Guest Dr.Rajeshwari Alagesan, Obstetrician & Gynecologist, Rajeswari Hospital, Thoothukudi, and the Guest of Honour Dr. K.Sathya Bama, Principal A.P.C Mahalaxmi College for Women, Thoothukudi shared their wonderful memories and emphasized on the importance of the bond between the Alumna and the Alma Mater.



#### **FACULTY**

Ms. D. Carolin Jeniba Rachel was appointed as Assistant Professor in Chemistry on 18th June 2018

## Research Activity

	Publications			Seminar/	2000 000	F	
Name of the Staff	Paper	Proceeding	Chapter	Conference	Webinar	Workshop	D P
Dr. J. Antony Rajam	1	3		2	2	1	A
Dr. C. ZozimusDivya Lobo	2	1	1	2	3		3
Ms, K. Sarayanadevi	1	4		1			
Ms. D. Carolin Jeniba Rachel		2		2	1	9	

#### RESOURCE PERSON

Convener for the Viva-Vice Examination for the Elementary School Teachers of Thoothukudi & Ramanathapuram Districts under the programme PDPET launched by National Institute of Open Schooling (NIOS) directed by MHRD on 26.01.2019.

#### INDUSTRIAL VISIT

PG Department of Chemistry organized a Industrial visit for the students of I M.Sc. (15) and II M.Sc. (8) as a part of their curriculum. The visit was based on the principle and working of the various instrumental methods such as NMR, SEM, EDAX, XRD, FT-IR and UV-Vis. The assembly and functions of solar panels and different types of batteries were explained by the expertise. Four faculty members escorted the students to CSIR-CECRI at CSIR-Central Electrochemical Research Institute, Karaikudi on 22nd March 2019. The purpose was to provide practical expose to the course students on namely Research Methodology and Nanoscience and Technology. The students were able to relate and comprehend the content of the course with real-time experience especially on doing their project work.



### STUDENTS ACTIVITIES

- Nine students of II M.Sc. Chemistry have presented their papers in various conferences and seminars.
- Three students have participated in national seminar on the topic "Synthesis of new phosphonium as multi- site phase transfer catalyst for alkylation reaction, Highly enantioselectivity asymmetric cyclo addition reaction using noval chiral organo catalyst" at St. Mary's College (Autonomous), Thoothukudi, on 11th April 2018.
- Eight students have participated in a seminar on "Chemistry for healthy living" at Pope's college (Autonomous) sawyerpuram on 1st February 2018.
- Thirteen students have participated in state level workshop on the topic "Google tools for Science Aspirants" organized by Research advisory committee, St. Mary's College (Autonomous), Thoothukudi, from 18th to 19th September 2019.
- Fourteen students have participated in state level seminar on the topic "Innovative Methods in Chemical Science" organized by the Department of Chemistry and Research Centre, Pope's College ( Autonomous), Sawyerpuram , on 6th February 2019.
- Three students have participated in national workshop on the topic "Computer Aided Drug Design" organized by the Department of Zoology, Sadakathullah Appa College (Autonomous), Tirunelveli on 24th to 25th January 2019.
- Five students have participated in state level workshop on the topic "Creating Blog For Google Genenration In 2.0 World" organized by the Department of Library, St. Mary's College (Autonomous), Thoothukudi, on 12th March 2019.

#### PG PROIECTS

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

Register No.	Name	Project Title
17SPCH01	Ambika K	Oxygen reduction on the surface of PANI modified GCE with 9,10- Phenanthrenequinone
17SPCH02	Asha G	Comparison of Eco-friendly synthesized Cobalt oxide nanoparticles by two different sativum spices, Its characterization and Photo- Catalytic activity
17SPCH03	Dinola A	Biosynthesis of ZnO &Ag Doped ZnO nanoparticles from Vitis Vinifera lea for antibacterial & Photocatalytic application
17SPCH04	Esakki Narthini M	Envirosafe Synthesis of Layered Graphene by green based surfactants, its characterisation and electrochemical behaviour
17SPCH05	Jasmine J	Photocatalytic activity & antimicrobial activity of undoped TiO <sub>2</sub> & Ag Doped TiO <sub>2</sub> nanoparticle assisted by Cicer arietinum
17SPCH06	Maria Chitra S	Molecular docking studies of phytomedicinal drug inhibitor in COPD disease
17SPCH07	Mistika S	Prospective study for drug discovery in Angitensin Converting Enzyme
17SPCH08	Nancy Silvia J C	Electro catalytic reduction of Oxygen in 2- Amino-3- Chloro-1,4- naphthoquinone solution at PANI modified GCE
17SPCH09	Syedali Fatima S	Corrosion inhibitors of mild steel in Thoothukudi ground water using plant extract



### HIGHER EDUCATION

Jasmine. J of II M.Sc. Chemistry pursues her Ph D research programme in V. O. Chidambaram College (Autonomous), Thoothukudi



PASS PERCENTAGE 91%