### RAJAH SERFOJI GOVERNMENT COLLEGE (A)

### Dr.M.Mangalam M.Sc.,M.Phil., (Ph.D)

**Assistant Professor of Chemistry** 

Rajah Serfoji Govt. College (Autonomous). Thanjavur – 613005

Mobile: 9095397734



### **Personal Details:**

Date of Birth - 18-November-1979

Nationality - Indian

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## **Educational Qualifications:**

Degree	School/University	From	То	Percentage
S.S.L.C	St. Annes .Girls Hr. sec school, Cuddalore	1995	1996	78.2%
HSC	St. Annes.Girls Hr.sec school, Cuddalore	1997	1998	70%
B.Sc	Madras University	1998	2001	68%
M.Sc	Annamalai University	2001	2003	70%
M.Phil	Annamalai University	2003	2004	78%
Ph.D.,	Bharathiyar University	2014	2023	

# **Teaching Experience – 20 Years**

POST HELD	INSTITUTION	PERIOD	
FOST HELD	INSTITUTION	FROM	ТО
Associate professor	Rajah Serfoji Government College, Thanjavur	2023	Till date
Assistant Professor	Rajah Serfoji Government College, Thanjavur	2010	2023
Assistant Professor	Govt.Arts College for Women, Pudukkottai	2008	2010
Lecturer	VRS Engineering College, Villupuram	2007	2008
Lecturer	Arunai Engineering College, Thiruvannamalai.	2004	2007

## **Orientation Course :1**

COURSE	INSTITUTE	PERIOD	
COCKSE	INSTITUTE	FROM	То
Tamilnadu State council for higher	Ethiraj Womens		
education and UGC – Academic Staff	College, Chennai	13.10.2008	08.11.2008
College, University of Madras			

## **Refresher Course :04**

COURSE	INSTITUTE	PERIOD		CDADE
COURSE		FROM	ТО	GRADE
UGC sponsored refresher	Bharathidasan			
course in Chemistry	University	20/11/2012	10/12/2012	A
Course in Chemistry	Tiruchirappalli			
UGC sponsored refresher	HRDC Pondicherry	08/06/2018	28/06/2018	A
course in Chemistry	University	08/00/2018	28/00/2018	
Ministry of education				
Teaching learning centre,	University of Delhi	05/08/2021	19/08/2021	A+
Ramanujan College				
Ministry of education				
Teaching learning centre,	University of Dellai	15/06/2022	05/07/2022	A+
Ramanujan College	University of Delhi			

## **Research Experience: 10 Years**

**Research Interest:** 

- i) Organic Synthesis
- ii) Inorganic Synthesis

#### **Research Guidance**

DEGREE	GUIDED	ONGOING
M.Phil.	-	-
Ph.D	-	-
M.Sc	35	2

#### **Publications: 06**

- M.Mangalam, N.Punitha, K.Vijayalakshmi "Synthesis Characterisation and Anti Microbial Studies on Metal Complexes derived from the Biologically Active Mannich Base Complexes derived from the Biologically Active Mannich based ligand". International journal of Nano Corrosion Science and Engineering ISSN Online: 2395-7018.2(6) (2015) 11-17
- N.Punitha, M.Mangalam, K.Vijayalakshmi. "Microwave Promoted Synthesis of Schiff base ligand using Natural Acid Catalist and its Nickel(II) and Copper(II)Complexes". International Journal of Nano Corrosion Science and Engineering ISSN Online: 2395-70182(6) (2015) 78-84
- K.Vijayalakshmi, N.Punitha, M.Mangalam "Green Synthesis of Schiff base and its complex using Natural a Acid Catalist Under Microwave Condition" International Journal of Nano Corrosion Science and Engineering ISSN Online: 2395-7018 2(6) (2015) 31-36

- M.Mangalam, N.Punitha , K.Vijayalakshmi "Solubility and Dissolution Enhancement of Simvastatin by the Preparation of Nano Particles Solid Dispersion using Natural Polymer" NANO VISION , Volume 5(4-6),139-148,April – June 2015 ISSN Online 2319-7633.
- M.Mangalam, C.Sebastian Antony Selvan, C.Shankar "Sythesis Steriochemical, Structural and Biological Studies of a Series of N-(2r,4c-diaryl-3,azabicyclo[3.3.1]Nonan—9-ylidene)pyrazine-2-carbohydrazides Journal of Molecular structure. 1129(2017)305-312
- M.Mangalam, C.Sebastian Antony selvan, C.Shankar "Synthesis biological evaluation,N-(2r6e-diarylthian-4-ylidene)-1,2,3-triazole -4- carbohydrazide "Adalya Journal Volume 9,Issue 10,October 2020 ISSN: 1301-2746.

## Paper Presented in Seminars, Conferences and Workshops: 18

- ❖ Synthesis and spectral characterization of NiS₂ NP & NiS PC Chromophores Containing Divalent Nickel and S,P,N,C Donors in the National Conference on "Fostering intrest in Chemistry among the Students" Organized by Department of Chemistry Periyar Arts College, Cuddalore on 25 & 26 September 2014
- ❖ One Pot Synthesis and Characterization of Symvastatin Sulphate using Microwave radiation in the National Seminar on "New Opportunities and Challenges in Chemical Research Organized by Department of Chemistry A.V.V.M Sri pushpum College (A), on 29 & 30 December 2014
- ❖ Natural Polymer by Nanotechnic in the National seminar on "Chemistry and efficacy of natural Products A demand in greater use of plant based drugs" Organized by Department of Chemistry Bon secours college for Women, Thanjavur on 20&21 February 2015
- ❖ Synthesis and Biological activities of some Mannich base ligand derivatives in the National Conference on "Current perspectives and challenges in biodiversity and its conservation" Organized by Department of Bio Chemistry Rajah serfoji Government College (A), Thanjavur, on 6 & 7 March 2015
- ❖ Solubility and Dissolution enhancement of Symvastatin by the preparation of Nano particles solid Dispersion using natural Polymerin the National Conference on "Thin flim Science and Nano Technology " Organized by Department of Physics, Rajah Serfoji Government College (A), Thanjavur, on 2 & 3 March 2015.

- ❖ Synthesis Chracterization and Anti Microbial Studies onetal Complexes derived from the Biologically active Mannich base ligand, 7-Dicyclohexylaminobenzyl-8- Hydroxy quinoline in the International Conference on "Chemical and environmental research" Organized by Jamal Mohammed College (A), Tiruchirapalli, on 17-December 2015.
- ❖ Synthesis, Stereo Chemical, Structural and Biological studies of some N-(2r,4c-diar yl 3-asabicylclo[3.3.1] Nonan − 9 -ylidene) pyrazine -2-carbohydrazide in the National Seminar on "Innovative Researches in Chemical Science "Organized by Department of Chemistry Khadir Mohideen College, Adirampattinam on 25- September 2016
- ❖ A Comparative in vitro evaluation of Anti Microbial activity of a Novel Mannich base ligand in the the National Seminar on "Mew trends in Chemistry" Organized by Department of Chemistry , Annamalai University , Chidambaram on 21 & 22 October 2016.
- ❖ Study of Heavy metals in surface Water polluted by anthropogenic activities in the State Level seminar on "Emerging Trends in Chemistry" Organized by Department of Chemistry, A.V.V.M Sri pushpum college, Poondi on 29 August 2017
- ❖ Design , Synthesis of substituted piperidine and piperazine derivatives as DNA inhibitors of Myco bacterium tuberculosis in the International Conference on "Recent Trends in Synthetic Methods and Material Chemistry" Organized by Department of Chemistry Annamalai University on 2 & 3 February 2018
- Synthesis, Spectral, biological evaluation of some new 3T- Alkyl -2r,6c-diaryl piperidin -4- One Hydrazones as Potential Antimicrobial And Anti tubercular Agents in the International seminar on "Novel Avenues in Environmental Issues and Protection" Organized by Marudupandiyar College, Thanjavur on 15 & 16 February 2018
- ❖ Mitigation of corrosion rate of mild steel using Synthesis inhibitor Mannich based derivatives in the international Seminar on "Mineral based system in Environmental engineering" Organized by Department of Chemistry Bon secours college for women, Thanjavur on 18 August 2018
- ❖ The corrosion inhibitior of Mild steel in acid Medium in the presence of Green inhibitors in the National Seminar on "The New Vistas in Chemical sciences " Organized by Department of Chemistry Government college for women, Kumbakonam, on 4&5 July 2019

- ❖ Design and Synthesis of piperazine –piperidone H37Rv inhibitors with improved pharmacokinetic profiles in the International Conference on "Frontier areas in Chemical technologies" Organized by Department of Industrial Chemistry, Alagappaa University, Karaikudi on 25&26 July 2019.
- ❖ Design , Synthesis , Docking Molecular stimulation studies of piperidone Thiazolidinone hybrid molecules and their tubercular properties in the National Seminar Organized by Department of Chemistry Government Arts College , Dharamapuri , on 30-August 2019
- ❖ The study of corrosion Mild steal by using green inhibitors in the National conference on "Recent Trends in Material science" Organized by Department of Chemistry and Physics Thiru.Vi.Ka Government arts college ,Thiruvarur on 14 February 2020
- ❖ Experimental investigation on corrosion effect on metal pipes in the International conference on "Features of materials chemistry in Agricultural, Biomedicine, Pharmaceutical and Nanotechnology" organized by Swami Dyananda College of Arts and Acience, Manjakudi, Thiruvarur on 13 October 2021.
- ❖ Synthesis and characterization of copper nano particles using catharanthus Roseus Plant Extract in the National conference on "Recent development of chemistry in Engineering Applications" organized by Department of chemistry SRM Valliammai Engineering college, Kattankullathur on 17 June 2023

## Seminars /Conferences /Workshops/FDP/Symposium Attended: 37

- **❖ Two days "Faculty Development Programme"** at helicks training institute at yercaud on 11&12 August 2007
- workshop on "Quality enhancement and sustenance in higher education through accreditation" at Government arts college for women (A) pudukkottai on 19 March 2009
- Workshop on" Future prospects in chemistry" at Government arts college for women pudukkottai on 28 January 2010
- ❖ Workshop on "Micro scale experiment in Chemistry" at A.V.V.M Shri pushpum college (A) on 11 December 2011

- ❖ Intercollegiate seminar on "Recent research perspectives in chemistry and Bio chemistry" at A.V.V.M Shri pushpum college on 16 December 2011
- ❖ National seminar on "Recent trends in polymer and green Chemistry" at Rajah serfoji Government College (A) on 2&3 February 2012
- ❖ National level workshop on "Modern trends in chemistry" at Kunthavai Naacchiyaar Government arts college for women 19 December 2014
- ❖ National Seminar on" Current trends in application oriented chemistry" at Rajah Serfoji Government College (A) on 36 October 2017
- ❖ One day online Faculty development program on "Funding schemes and patenting scientific innovations" at Govert arts college Trichy IQAC and Department of chemistry on 13 June 2020
- ❖ Webinar on" Electronic spectroscopy and pericyclic reactions" at Seethalakshmi Ramaswamy college Department of Chemistry on 17 & 18 June 2020
- ❖ International webinar on "principle and application of green chemistry in organic synthesis and analytical sciences" at KIETgroup of Institutions, Department of Applied sciences on 20 June 2020.
- ❖ International virtual conference on "Novel biotechnological approaches to combat emerging Diseases with special focus" on SARS associated Corona virus Therapeutics at Presidency college Department of plant biology on 26 June 2020
- ❖ National Webinar on "Yoga" at Rajah Serfoji Government college (A) Department of Zoology on 1,2 and 3 July 2020
- ❖ One Day seminar on "Curriculum development and design" at Rajah Serfoji Government College, IQAC on at 16 December 2020
- ❖ National Webinar on "Women safety" at Tamilnadu Physical education and sports University Department of exercise physiology and nutrition on 29 May 2021
- ❖ One day international webinar on "Challenges and opportunities in advanced materials" at government arts college Thiruchirapalli Department of chemistry and IQAC on 14 July 2021

- ❖ One day National Webinar on "Lockdown positive perspectives and challenges" at Government Arts college Thiruchirapalli Department of chemistry on 2 July 2021
- ❖ Two days international virtual symposium on "women empowerment" at Bharathi Women's college (A) Chennai centre for women Empowerment in association with Tamil nadu. State council for science and technology on 3&4 July 2021
- ❖ International webinar on "Innovative research in Chemical sciences" at Government arts college Thiruchirapalli Department of chemistry on 10 July 2021
- ❖ National webinar on "NMR spectral applications of organic compounds" at Government arts college Thiruchirapalli Department of chemistry on 29 July 2021
- ❖ UGC Sponsored webinar on "Yoga for wellness" at HRDC Bharathidasan university Thiruchirapalli on 6 August 2021
- ❖ UGC Sponsored webinar on "Climate Change" at HRDC Bharathidasan University Thiruchirapalli on 11 August
- ❖ UGC Sponsored webinar on "professional ethics for teachers" at HRDC Bharathidasan university Thiruchirapalli on 16 August 2021
- ❖ Webinar on" How to write Quality Research paper" at Sigma Institute of engineering, Vadodara, Gujarat on 18 September 2021
- ❖ 10 Days webinar series on "Excellence of women in the field of science and technology" at Sathyabama Institute of science and technology ,Department of physics and centre for Nano science and Nano technology on 13 to 23 September 2021
- ❖ Webinar on "patent filling process and challenges" at Jamal Mohammed college Thiruchirapalli Intellectual property right cell on 30 September 2021
- ❖ One week national Faculty development programme on "Innovation and Intellectual property rights" at Chevalier T.Thomas Elizabath college for women collaboration with CSIR —Institute of minerals and materials technology Bhuvaneswar on 04-10-2021 to 10-10-2021.

- ❖ One week virtual National Faculty development programme on "Evolution of smart materials and their contemporary advances" at ST.Hindu college ,on 25-10-2021 to 30-10-2021
- ❖ Two days Faculty development programme on "Cultivation of research excellence to enhance innovation and professional development" at Pannimalar engineering college, Chennai on 1&2 November 2021.
- **❖ Two days Faculty development programme** on "Biostatistics in life science research" at Thassim Beevi Abdul Kader College for women, Ramanathapuram, on 8&9 November 2021.
- ❖ One week national E- Workshop on "Rural techpreneurship development" at Chevalier T.Thomas Elizabath college for women collaboration with CSIR − Institute of minerals and materials technology, Odisha on 15-122021 to 21-12-2021.
- ❖ Seven days virtual Faculty development programme on "Best Practices for Next Gen Teachers" at SRM Institute of science and technology Ramapuram campus Chennai on 30-05-2022 to 07-05-06-2022.
- ❖ International webinar on" Innovations in Materials Processing: Importance of ceramic shell moulds for Investment casting of gas Turbines components" at Bharat Institute of Engineering and technology in collaboration with Centre for Reseach and Development in education and social integration (CRESIHRD). Indian ceramic society ,Hyderabad on 20 August 2022.
- ❖ International webinar on" Indigenous Materials for energy storage Applications" at Bharat Institute of Engineering and technology in collaboration with Centre for Reseach and Development in education and social integration (CRESIHRD), Hyderabad on 03 September 2022

- ❖ International webinar on" Educators Role in promoting mental health and wellness" at Centre for Reseach and Development in education and social integration (CRESIHRD). Indian ceramic society, Hyderabad on 17 September 2022.
- ❖ International webinar on "Breaking Barriers in science" at Kamala Nehru Mahavidyalaya , Nagpur, Association of chemistry teachers Mumbai in Collabration with IUPAC, Global Women Breakfast held on 14 February 2023.
- ❖ Two days virtual International conference on" Recent trends in scientific research" at Dr.Ambedkar Government Arts College in Association with Tamilnadu state council for science and technology and science city, Chennai on 30 &31August 2023.

### **Membership in Professional Bodies:**

**Life Member**: Tamilnadu Science Forum (A network organization of NCSTC, DST, Govt. of India).

## Academic Bodies (such as Board of Studies etc...

- ❖ Member in **Sports committee** in Rajah Serfoji Government college, Thanjavur.
- ❖ Member in **Board of studies** in Rajah Serfoji Government College ,Thanjavur.
- Member in Income Tax Verification Committee in Rajah Serfoji Government College, Thanjavur.
- Member in Discipline Committee in Rajah Serfoji Government College, Thanjavur.
- ❖ Member in **Fine arts club** in Rajah serfoji Government college, Thanjavur,
- \* Women's Cell Coordinator in Rajah Serfoji Government College Thanjavur.

#### Others:

- ❖ Cleared **Departmental Examination** (**EO**) in the Year of 2010.
- ❖ Acted as an **Judge** in intra school competition at J.R.K Nursery and Primary School, Thanjavur 2014-2018
- ❖ Acted as an **Judge** in Inter School Competition English Elocution at Yagappa International School Thanjavur 2017&2018 conducted by YMCA
- ❖ Acted as a Panel Member in the National seminar on Chemistry and efficacy of natural products demand in greater use of plant based drugs held on 20&21 February -2015, Organized by Department of chemistry, Bon secours college for women Thanjavur
- ❖ Acted as Organizing secretary for three days National Level E − Quiz "Solid State Chemistry" between 26.06.2020-28.06.2020
- ❖ Acted as Organizing Secretary for three days National level E − Quiz on " Women Empowerment" between 08.03.2021-10.03.2021
- ❖ Acted as Organizing Secretary for five days National Level E − Quiz on "World Ozone day Awareness Quiz" between 16.09.2021-20.09.2021
- ❖ Awareness speech was given to the UG first year student, online **Induction programme** conducted by Rajah Serfoji Government College on September 2021.
- ❖ Awareness speech was given to the UG first year student, Induction programme conducted by Rajah Serfoji Government College on July2022
- ❖ Awareness speech was given to the UG first year student, **Induction programme** conducted by Rajah Serfoji Government College on July2023
- ❖ Staff In charge of the Metrics for criteria 7 under measurements initiated by the institution for the promotion of gender equity during the last five years (IQAC)
- ❖ Acted as an Judge in Inter School Competition English Elocution at Yagappa International School – Thanjavur 2023 conducted by YMCA
- ❖ Acted as an Academic Expert in Board of Studies at Periyar Maniammai Institute of Science & Technology, vallam, Thanjavur on June 2023