



Name: Dr.R. Manonmani

Qualification: M.Sc., M. Phil., B.Ed., Ph.D

Designation: Assistant Professor

Years of Experience: UG: 01Year & 5 months PG: 0

Previous Experience: UG: 11.5 PG: 0

Area of Specialization:Organic Chemistry, Electrochemistry

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MEMBERSHIP

S.No.	Details	State/National/International
1	Life time member in “Society for Tissue Engineering and Regenerative Medicine - India (STERMI)”, LM 105	National
2	Life time member in “Society for Biomaterials and Artificial Organs-India (SBAOI)”, LM 635	National

PROJECTS

S.no.	Title	Duration	Funding agency	Amount sanctioned (in lakhs)
1	Functionally Graded Hydroxyapatite/Tricalcium Phosphate Coatings on Titanium and its Alloys by Electrophoretic Deposition	Two years (January 2015- January 2017) <i>Executed at Rajalakshmi Engineering College</i>	UGC minor research project	Rs.2,55,000

WORKSHOPS

S.no.	Organized by	State/National/International	Topic	Date(s)
1	Vels University, Chennai.	State	Two Day Workshop on Powder X-ray Diffraction and Data Processing	27.09.2019 to 28.09.2019
2	Indian Institute of Science, Bangalore	International	Young Scientist Training workshop (BIOMAT-12)	06.12.2012 to 08.12.2012

CONFERENCES ATTENDED / PRESENTED PAPER

S.no	Organized by	State/National/International	Participated/ Presented	Title	Date(s)
1	NACE and Indian Institute of Technology, Madras	International	Presented	Enhancing Corrosion Resistance and Cells Proliferation with Osteocompatible Nano Triphasic Bioceramic Coatings	05.03.2020 to 07.03.2020
2	SRM Valliammai Engineering College &	National	*Presented	*Fabrication of NTPC coating on 316L SS by Electrophoretic Deposition Process for Biomedical Application	09.02.2019

	Department of Chemistry				
3	Dept. of Analytical Chemistry & University of Madras	International	Presented	Surface And Electro Analytical Characterization of Nanotriphasic Bioceramic Coatings	15.03.2018 to 17.03.2018
4	Dept. of production Technology & MIT, Chennai	International	Participated	Recent Innovation In Production Engineering – (RIPE 17)	15.03.2017 to 17.03.2017
5	Dept. of Analytical Chemistry & University of Madras	International	*Presented	*Interface Characteristics of Electrophoretically Deposited HAP-Ti Composite Coatings in Ringer's Solution	28.12.2015 to 30.12.2015
6	NACE south zone & Trade Centre, Chennai	International	Presented	Electrochemical Performance of Nano Hydroxyapatite Coatings on Medical Grade 316L SS for Biomedical Application	19.11.2015 to 21.11.2015
7	NACE south zone & Indian Institute of Technology, Chennai.	International	Presented	Improved Corrosion Resistance of Hydroxyapatite Coating on 316L SS in Hank's Solution'	31.07.2015 to 01.08.2015
8	Dept. of Chemistry & Anna University, Chennai	International	Presented	Bioactive Bioceramic Coating on 316L SS	05.02.2015 to 07.02.2015
9	NACE South zone, IIT Madras	International	Participated	Corrosion Prevention Symposium for Research Scholars (CORSYM-13)	28.02.2013 to 02.03.2013
10	Dept. of Biotechnology & Rajalakshmi Engineering College, Chennai	International	Presented	Surface Modification of 316L SS Orthopaedic Implants With Bioactive Bioceramic Coating	02.01.2013 to 04.01.2013
11	Dept. of Chemistry & Rajalakshmi Engineering College, Chennai	International	Participated	Biomaterials Implant Devices and Tissue Engineering (BIDTE -12)	06.01.2012 to 08.01.2012

SEMINARS

S.no.	Organized by	State/national/international	Topic	Date(s)
1	Dept. of Chemistry & Dhanalakshmi College of Engineering, Chennai.	National	Two days National Seminar on Earth and Environmental Sciences in the Context of Climate Change (NSECC – 2018)	24.01.2018 to 25.01.2018
2	Dept. of Chemistry & Arulmigu Palaniandavar Arts College for Women,	National	The widening Horizons of chemistry TWHC-(II)-2013	11.02.2013

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3	Dept. of Chemistry, Velammal Institute of Technology, Chennai	National	Recent Trends in Biomaterials for Tissue Engineering	27.07.2012 to 28.07.2012
4	Dept. of Chemistry, P.S.G.R. Krishnammal College for Women, Coimbatore.	National (Paper Presented)	Seminar on “Advances in Research and Innovations in Chemistry”. Paper Title: Effect of β - Cyclodextrin Complexation in Photolysis of Trans-2- Styryl Pyridine	28.09.2007
5	Dept. of Chemistry & Jeyaraj Annapackyam College for Women, Periyakulam.	National	Recent Trends in Chemistry	09.08.2007 to 10.08.2007
6	Dept. of Chemistry & Fatima college, Maduari.	National	Recent Trends in Chemistry	17.12.2004
7	Dept. of Chemistry, Thiyagarajar College, Madurai.	National (Paper Presented)	Inter Collegiate Students Seminar Paper Title: Structure- Activity of Biologically Important Natural Products	25.02.2004

CERTIFICATE COURSES /VALUE ADDED COURSES

S.no.	Offered by	Topic	Duration
1	Swayam-NPTEL	Electronic waste management –Issues and challenges	4 weeks (27.01.2020 to 29.03.2020)
2	Swayam-NPTEL	Bioinorganic Chemistry	4 weeks (26.08.2019 to 16.11.2019)

JOURNAL PUBLICATIONS

S.NO.	JOURNAL NAME	UGC /SCI/SCIE /WOS	ISBN / ISSN NUMBER	REFERENCE	DATE OF PUBLICATION/D OI
1	Journal of the Iranian Chemical Society	Scopus & SCI	1735-207X	Recent advances in the development of carbon/metal oxides Nano hybrids for enhanced H ₂ S detection: a review	02.01.2023 DOI: 10.1007/s13738- 023-02742-9
2	Surface Engineering and Applied Electrochemistry	Scopus UGC	1068-3755	Effect of Sintering Atmosphere on Nano Biocomposite Coated 316L Stainless Steel for Corrosion Control in Biomedical Applications	DOI: 10.3103/S10683755 21060107 Accepted
3	Bulgarian Chemical Communications	Scopus, WOS, UGC	0324-1130	Electrodeposition of HAP/TiO ₂ on type 316L stainless steel for orthopedic application	27.10.2021 / DOI: 10.34049/bcc.53.3.5 353

4	Surface Engineering and Applied Electrochemistry	Scopus UGC	1068-3755	Biocompatible Nano Composite Coating on 316L Stainless Steel Surface for Bone Implant Application	17.07.2021/ DOI: 10.3103/S10683755 2103011X
5	Journal of the Iranian Chemical Society	Scopus, SCI, WOS	1735-207X	Deposition of biocompatible nano biocomposite layers on 316L SS surface for bone implant applications	16.04.2021 / DOI 10.1007/s13738- 020-02097-5
6	Journal of the Australian Ceramic Society	Scopus, SCI, WOS, UGC	2510-1560	Novel nano triphasic bioceramic composite coating on 316L SS by electrophoretic deposition process for enhanced corrosion resistance and cells proliferation	27.01.2021/ DOI: 10.1007/s41779- 020-00526-5
7	International Journal of Innovative Research in Science, Engineering and Technology	-	2319-8753	In vitro bioactivity, corrosion resistance and mechanical properties of nano composite coated 316L SS for orthopaedic applications	10.10.2020/ DOI:10.15680/IJIR SET.2020.0910034
8	Journal of Materials Research	Scopus, SCI, WOS, UGC	0884-2914	Sintering temperature effects on nano triphasic bioceramic composite coated 316L SS for corrosion resistance, adhesion strength, and cell proliferation on implants	14.01.2020/ DOI: 10.1557/jmr.2020.2 2
9	Surface Engineering	Scopus, SCI, WOS, UGC	0267-0844	Electrochemical, mechanical and osseointegration evaluation of NBPC coated 316L SS by EPD	26.06.2017/ DOI: 10.1080/02670844.2 017.1341224
10	RSC Advances	Scopus, SCI, WOS, UGC	2046-2069	Interlayer TiO ₂ – HAP composite layer for biomedical applications	03.07.2016/ DOI: 10.1039/c6ra07346h

FDP/STTP

S.No.	Organized by	State/National/International	Topic	Date(s)
1	Post graduate and Research Department of Chemistry, J K K Nataraja College of Arts Science, Kumarapalayam	National	Recent trends on Research Development in Chemistry	31.10.22 to 07. 11.22
2	Department of Chemistry, SRM Institute of Science and Technology, Chennai	National	Green chemistry for sustainable development	16.05.22 To 21.05.22
3	Mohamed Sathak A.J.	National	Growth, Characterization	10.06.2021

	College of Engineering, Chennai,		of NLO materials and Spectroscopic Studies	to 12.06.2021
4	Rajalakshmi Engineering College, Chennai	National	AICTE Margdarshan online- FDP on Quality Assessment & Projects for NBA	16.11.2020 to 21.11.2020
5	Kongu Engineering College, Erode	National	Journey of Nanomaterials for Intense Applications	07.07.2020 to 09.07.2020
6	A.P.C. Mahalaxmi College for Women, Thoothukudi	National	Innovation & Intellectual Property Rights	06.07.2020
7	Rajalakshmi Engineering College, Chennai	National	COVID-19 Dataset Analysis Using Pandas in Python	05.06.2020 to 06.06.2020
8	Panimalar Institute of Technology, Chennai	National	Advancement in Science and Humanities	25.05.2020 to 29.05.2020
9	Arulmigu Palaniandavar Arts College for Women, Palani	National	Teaching, learning and evaluation	04.05.2020 to 06.05.2020
10	SRM University, Kattankulathur, Chennai.	National	Short Term Training Course on Corrosion and its Control	30.01.2014 to 31.01.2014

WEBINARS [National/International]

S.no.	Organized by	State/National/International	Topic	Date(s)
1	Department of chemistry, Tamilnadu open University, Chennai	International	One day international webinar on Solar Photovoltaics	19.07.22
2	Saraswathi Narayanan College, Madurai.	International	Nanotechnology for sensor, Electrocatalyst materials and Medicinal Applications	13.07.20 to 14.07.20
3	Saraswathi Narayanan College, Madurai	International	Nano Biomaterials for Drug Delivery Applications	22.06.2020
4	Rathinam College of Arts and Sciences, Coimbatore.	International	Writing Proposal for Funding Agencies Project Design and Project Proposals	29.05.2020
5	Sathyabama Institute of Science and Technology, Chennai.	International	Recent advances in electrochemical science for energy and environment	15.05.2020 to 19.05.2020
6	Thiagarajar College, Madurai.	International	Functional novel materials for electrochemical sensors and energy storage devices	15.05.2020
7	Ethiraj College for Women, Chennai	National	Atom by Atom Engineering in Cluster Science	06.02.2023
8	Loyola College, Chennai	National	Applications of edible	23.09.2022

			coatings and composite films in food packaging	
9	Ethiraj College for Women, Chennai	National	Basic Concept of Electro-Organic Synthesis	27.05.2022
10	Ethiraj College for Women, Chennai	National	Reaction Mechanism and Dynamics via Theoretical Methods	21.04.2022
11	Ethiraj College for Women, Chennai	National	Basics of Supramolecular Chemistry	03.03.2022
12	Tamil Nadu Open University, Chennai	National	Integrated Approach in Science and Technology for Sustainable Future	28.02.2022 & 01.03.2022
13	Ayya Nadar Janaki Ammal College, Sivakasi	National	Recent Advances in Medicinal Chemistry	27.12.2021 & 28.12.2021
14	Vinayaka Mission's Research Foundation - VMRF Deemed to be University, Chennai.	National	Reimagine-Recreate-Restore an Environmental Awareness	05.06.2021
15	SRM Institute of Science and Technology, Ramapuram, Chennai.	National	Impact of Climate Change	05.06.2021
16	Sathyabama Institute of Science and Technology, Chennai.	National	Introduction to Metal Oxide Nanostructures for Sensing Applications	15.06.2020
17	Arulmigu palaniandavar college of arts and culture, Palani.	National	One day Programme on interactive tool on biodiversity for world environmental Day	05.06.2020
18	Sacred Heart College, Tirupattur.	National	Lecture series on Spectroscopy and its Perspective	05.06.2020
19	Mannar Thirumalai Naicker College, Madurai.	National	Nanoscale Materials with Different Dimensions for Advanced Application	03.06.2020 to 04.06.2020

OTHERS

1. Organized National Webinar on Basic Concept of Electro-Organic Synthesis, Post Graduate and Research Department of Chemistry, Ethiraj College for Women, Chennai, 27.05.2022.