



**Dr. R. Manonmani**

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

**Designation:** Assistant Professor

**Years of Experience:** UG: 02 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	<b>Rs.2,55,000</b>

**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 & Department of Chemistry	National	*Presented	*Fabrication of NTPC coating on 316L SS by Electrophoretic Deposition Process for Biomedical Application	09.02.2019

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, Palani.	National	The widening Horizons of chemistry TWHC-(II)-2013	11.02.2013
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”.  <b>Paper Title:</b> Effect of $\beta$ -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, Madurai.	National	Recent Trends in Chemistry	17.12.2004
7	Dept. of Chemistry, Thiyagarajar College, Madurai.	National (Paper Presented)	Inter Collegiate Students Seminar  <b>Paper Title:</b> 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	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  <b>Accepted</b>
2	Bulgarian Chemical Communications	Scopus, WOS, UGC	0324-1130	Electrodeposition of HAP/TiO <sub>2</sub> on type 316L stainless steel for orthopedic application	27.10.2021 / DOI: 10.34049/bcc.53.3.5 353
3	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
4	Journal of the Iranian Chemical Society	Scopus, SCI, WOS	1735-207X	Deposition of biocompatible nanobiocomposite layers on 316L SS surface for bone implant applications	16.04.2021 / DOI 10.1007/s13738-020-02097-5
5	Journal of the Australian Ceramic Society	Scopus, SCI, WOS, UGC	2510-1560	Novel nanotriphasicbioceramic composite coating on	27.01.2021/ DOI: 10.1007/s41779-020-00526-5

				316L SS by electrophoretic deposition process for enhanced corrosion resistance and cells proliferation	
6	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
7	Journal of Materials Research	Scopus, SCI, WOS, UGC	0884-2914	Sintering temperature effects on nanotriphasicbioceramic composite coated 316L SS for corrosion resistance, adhesion strength, and cell proliferation on implants	14.01.2020/ DOI: 10.1557/jmr.2020.22
8	Surface Engineering	Scopus, SCI, WOS, UGC	0267-0844	Electrochemical, mechanical and osseointegration evaluation of NBPC coated 316L SS by EPD	26.06.2017/ DOI: 10.1080/02670844.2017.1341224
9	RSC Advances	Scopus, SCI, WOS, UGC	2046-2069	Interlayer TiO <sub>2</sub> – 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	Mohamed Sathak A.J. College of Engineering, Chennai,	National	Growth, Characterization of NLO materials and Spectroscopic Studies	10.06.2021 to 12.06.2021
2	Rajalakshmi Engineering College, Chennai	National	AICTE Margdarshan online- FDP on Quality Assessment & Projects for NBA	16.11.2020 to 21.11.2020
3	Kongu Engineering College, Erode	National	Journey of Nanomaterials for Intense Applications	07.07.2020 to 09.07.2020
4	A.P.C. Mahalaxmi College for Women, Thoothukudi	National	Innovation & Intellectual Property Rights	06.07.2020
5	Rajalakshmi Engineering College, Chennai	National	COVID-19 Dataset Analysis Using Pandas in Python	05.06.2020 to 06.06.2020
6	Panimalar Institute of Technology, Chennai	National	Advancement in Science and Humanities	25.05.2020 to 29.05.2020
7	ArulmiguPalaniandavar Arts College for Women, Palani	National	Teaching, learning and evaluation	04.05.2020 to 06.05.2020
8	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	Saraswathi Narayanan College, Madurai.	International	Nanotechnology for sensor, Electrocatalyst materials and Medicinal Applications	13.07.20 to 14.07.20
2	Saraswathi Narayanan College, Madurai	International	Nano Biomaterials for Drug Delivery Applications	22.06.2020
3	Rathinam College of Arts and Sciences, Coimbatore.	International	Writing Proposal for Funding Agencies Project Design and Project Proposals	29.05.2020
4	Sathyabama Institute of Science and Technology, Chennai.	International	Recent advances in electrochemical science for energy and environment	15.05.2020 to 19.05.2020
5	Thiagarajar College, Madurai.	International	Functional novel materials for electrochemical sensors and energy storage devices	15.05.2020
6	Vinayaka Mission's Research Foundation - VMRF Deemed to be University, Chennai.	National	Reimagine-Recreate- Restore an Environmental Awareness	05.06.2021
7	SRM Institute of Science and Technology, Ramapuram, Chennai.	National	Impact of Climate Change	05.06.2021
8	Sathyabama Institute of Science and Technology, Chennai.	National	Introduction to Metal Oxide Nanostructures for Sensing Applications	15.06.2020
9	Arulmigupalaniandavar college of arts and culture, Palani.	National	One day Programme on interactive tool on biodiversity for world environmental Day	05.06.2020
10	Sacred Heart College, Tirupattur.	National	Lecture series on Spectroscopy and its Perspective	05.06.2020
11	Mannar Thirumalai Naicker College, Madurai.	National	Nanoscale Materials with Different Dimensions for Advanced Application	03.06.2020 to 04.06.2020