

PROFORMA FOR BIODATA

1. Name : **Dr. J.BALAJI**
2. Designation : **ASSISTANT PROFESSOR**
3. Department : **CHEMISTRY**
4. Correspondence Address : **DEPARTMENT OF CHEMISTRY, NATIONAL COLLEGE, TRICHY- 620001**
5. Email and Contact number : balajji@nct.ac.in, balajitcl89@gmail.com and **9524354403**
6. Date of Birth : **13/07/1989**
7. Gender : **MALE**
8. Category (Gen/SC/ST/SCA/DNC/MBC/BCM/BC) : **GEN**
9. Whether differently abled : **NO**
10. Academic Qualification

	Degree	Year	Subject	University/Institution	% of Marks
1.	Ph.D	2014-2018	CHEMISTRY	The Gandhigram Rural Institute - Deemed to be University, Dindigul	Highly Commended
2.	M.SC	2010-2012	CHEMISTRY	St.Joseph's College, Trichy	First class (64.5%)
3.	B.SC	2006-2009	CHEMISTRY	St.Joseph's College, Trichy	First class (65%)

11. Ph.D thesis title: **Enhancement of Performance of Sol-gel Coatings for Mitigation of Metallic Corrosion in Neutral Medium**

Guide's Name : **Dr.M.G.Sethuraman**

Institution/ University : **The Gandhigram Rural Institute - Deemed to be University.**

Year of Award : **2018**

12. Work Experience

S. No	Position held	Name of the Institute	From	To	Pay Scale
1.	Research and Development Manager	Thirumalai Chemicals Limited, Ranipet	01.11.2022	31.02.2024	Rs.12 Lakhs PA
2.	Research Professor	Yeungnam University, Gyeongsan, Republic of Korea	01.09.2020	01.10.2022	Rs.16.8 Lakhs PA

3.	Post Doctoral Researcher	Chonnam National University Gwangju, Republic of Korea	01.04.2019	31.03.2020	Rs.14.5 Lakhs PA
4.	Assistant Professor of Chemistry	Kalasalilingam Institute of Technology	01.06.2018	31.01.2019	Rs.3.84 Lakhs PA
5.	Assistant Professor of Chemistry	Karpagam Academy of Higher Education (Deemed University)	01.07.2017	30.05.2018	Rs.2.76 Lakhs PA

13. Professional Recognition/ Award/ Certificate/ Fellowship received by the applicant

- ❖ **Best Poster Presentation and Cash Award** in Corrosion Awareness Day (CAD – 15) held on 17th April, 2015 at Gandhigram Rural Institute – DU, Gandhigram, Tamil Nadu, India.
- ❖ **Senior Research Fellowship (SRF)** of UGC-BSR, New Delhi, from March, 2016 to April 2017.
- ❖ **Junior Research Fellowship (JRF)** of UGC-BSR, New Delhi, during March 2014- March 2016

14. Publications

S. No.	Author(s)	Title	Name of Journal	Volume	Page	Year
1.	S. Ghoreishiamiri, P. Bothi Raja, M. Ismail, S. Hashemikarouei, J.Balaji , Tae Hwan Oh	Effect of corrosion inhibitors on reinforced concrete properties—a review, Surface Review	Surface Review and Letters	30	2330006	2023
2.	J.Balaji* , K Aruchamy, Tae Hwan Oh	Binder-free PEO/PPy/PEDOT: PSS layer coated on nickel foam for high-performance asymmetric supercapacitor applications	Ionics	28	1-14	2022
3.	J.Balaji* , P. Bothi Raja, M.G.Sethuraman, Tae Hwan Oh	Recent studies on sol-gel based corrosion protection of Cu—A review	Journal of Sol-Gel Science and Technology	103	12-38	2022
4.	J.Balaji* , P. Bothi Raja, M.G.Sethuraman, Tae Hwan Oh	Electrochemical, DFT And Multiscale Simulation Studies On Self-Assembled Films Of 2-Amino-4-	Surface Review and Letters	29	2250059	2021

		Methyl-Pyridine Inhibitor For Copper Metal Corrosion Protection In 3.5% NaCl Medium				
5.	J.Balaji* , P. Bothi Raja, M.G.Sethuraman, Tae Hwan Oh	Experimental and multiscale simulation studies on Chitosan doped Hybrid/Zirconium—a bio-nanocomposite coating for aluminium protection	Journal of Sol-Gel Science and Technology	100	341-351	2021
6.	J.Balaji* , Tae Hwan Oh	3-Mercaptopropanoic Acid-Doped Chitosan/Hybrid-Based Multilayer Sol-Gel Coatings for Cu Protection in 3.5% NaCl Solution	Polymers	13	3743	2021
7.	J.Balaji* , Tae Hwan Oh, M.G.Sethuraman	Effects of pH on inhibitor-doped hybrid protective sol-gel coatings on the copper electrode surface	Journal of the Taiwan Institute of Chemical Engineers	119	259-268	2021
8.	TNJI Edison, R Atchudan, N Karthik, J.Balaji , D Xiong, YR Lee	Catalytic degradation of organic dyes using green synthesized N-doped carbon supported silver nanoparticles	Fuel	280	118682	2020
9.	J.Balaji , Sung-Hee Ro, T.N. Jebakmar Immanuel Edison, Ho-Young Jung, M.G.Sethuraman,	Sol-gel based hybrid silane coatings for enhanced corrosion protection of copper in aqueous sodium chloride	Journal of Molecular Liquids	302	112551	2020
10.	J.Balaji , M.G.Sethuraman, Sung-Hee Ro, Ho-Young Jung,	Recent Development of Sol-Gel based Polymer Electrolyte Membrane for Vanadium Redox Flow Battery – A Review	Polymer Testing	89	106567	2020
11.	J.Balaji ,	Chitosan-doped-hybrid/TiO₂	International Journal of	104	1730-1739	2017

	M.G.Sethuraman, ,	nanocomposite based sol-gel coating for the corrosion resistance of aluminum metal in 3.5% NaCl medium	Biological and Macromolecules			
12.	R.Babhu Vignesh, J.Balaji, M.G.Sethuraman	Surface modification, characterization and corrosion protection of 1,3-diphenylthiourea doped sol-gel coating on aluminium	Progress in Organic Coatings	111	112-123	2017
13.	J.Balaji, M.G.Sethuraman	Corrosion Protection of Copper with 3-Glycidoxypropyltri methoxysilane based Coating through 3-Amino-5-Mercapto-1,2,4-Triazole Doping	Research on Chemical Intermediates .	42	1315-1328	2016
14.	J.Balaji, M.G.Sethuraman	Studies on the effects of thiourea and its derivatives doped - hybrid/zirconium nanocomposite based sol-gel coating for the corrosion behaviour of aluminum metal	Progress in Organic Coatings	99	463-473	2016
15.	J.Balaji, M.G.Sethuraman	Improved corrosion resistance by forming multilayer over copper surface by electrodeposition followed by novel sol-gel coating method	RSC Advances	6	95396-95404	2016
16.	J.Balaji,M.G.Sethuraman, ,	Study of ethylurea doped hybrid zirconia nanoparticles based sol-gel coating for corrosion protection of Aluminum	Materials Focus (American Scientific Publishers)	5	368-376	2016
17.	J.Balaji, M.G.Sethuraman	Corrosion Protection of Copper with Hybrid Sol-Gel Containing 1H-1, 2, 4-triazole-3-thiol,	Iranian Journal of Chemistry and Chemical Engineering	35	61-67	2016

h-index : **10**
i10 index : **10**
Total citations : **361**

15. Details of patents : **NIL**

16. Books/ Reports/Chapters/General articles etc : **NIL**

S. No	Title	Author's Name	Publisher	Year of Publication

17. Research guidance : **NIL**
Ph.D. : Awarded :
Submitted :
On going :
M.Phil. : Awarded :
M.Sc. Dissertation : Awarded :

18. List of Completed/Ongoing/Submitted projects : **NIL**

S.No	Title of the Project	Duration		Total Cost (Rs.)	Name of Funding Agency	Status
		From	To			

(a) Major Results/ Highlights of the project including achievement(publications, patents etc.), for *completed projects*

(b) Up-to date Technical progress report for *on-going projects*.

19. Membership : **NIL**

- (a) Professional bodies
- (b) Editorial board
- (c) Advisory board
- (d) Academic bodies

20. Countries visited : **SOUTH KOREA**

21. Any other Information : **NIL**

DECLARATION:-

I certify that the foregoing information is correct and complete to the best of my knowledge and belief.

Place: NCT,TRICHY

Date: 01/08/2024



Signature