



**Name** : Dr V.Hemapriya  
**Designation** : Associate Professor  
**Department** : Chemistry  
**Qualification** : Ph. D  
**Experience** : Teaching -25 Years  
**Research** : 25 Years  
**AreaofSpecialization(s)** : Electrochemistry, Corrosion Science  
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#### Academic Qualifications

<b>Degree</b>	<b>Branch</b>	<b>Institution/UniversityName</b>	<b>Year of Graduation</b>
Ph.D.	Chemistry	P.S.G.R. KrishnammalCollege for Women, Coimbatore	2016
M. Phil	Chemistry	P.S.G.R. KrishnammalCollege for Women, Coimbatore	2004
M. Sc	Chemistry	P.S.G.R. KrishnammalCollege for Women, Coimbatore	1999
B. Sc	Chemistry	P.S.G.R. KrishnammalCollege for Women, Coimbatore	1997

#### Research Guidance

<b>Programme</b>	<b>No.of Scholars</b>	
	<b>Completed</b>	<b>Pursuing</b>
MPhil	13	-

#### Research Publications (Indexed)

**International** A two-step strategy to synthesis new aminoguanidinium complexes: cytotoxic effect and perspectives, Arunadevi N.;Kanchana P.;Hemapriya V.;Mehala M.;Swathika M.;Chung I.M.;Prabakaran M., Inorganic and Nano Metal Chemistry, 2024

1. Synthesis and crystal growth of cadmium naphthoate crystal for second order non-linear optics and cytotoxic activity, Arunadevi N.;Kanchana P.;Hemapriya V.;Sankaran S.S.;Mayilsamy M.;Balakrishnan P.D.;Chung I.M, Prabakaran M. *Journal of Dispersion Science and Technology*,2022
2. New transition metal(II) complexes with naphthoate and aminoguanidine-based ligands: a combined spectroscopic and theoretical study with its applications, Kanchana P.;Aruna Devi N.;Prabha Devi B.;Shanmuga Sundari S.;Hemapriya V.;Chung I.M.;Prabakaran M., *Journal of Coordination Chemistry*, 2022
3. Phytofabrication of silver nanoparticles from *Limonia acidissima* leaf extract and their antimicrobial, antioxidant and its anticancer prophecy, Kanchana P.;Hemapriya V.;Arunadevi N.;Sundari S.S.;Chung I.M.;Prabakaran M., *Journal of the Indian Chemical Society*,2022
4. *Liriopé platyphylla* extract as a green inhibitor for mild steel corrosion in sulfuric acid medium, Chung I.M.;Hemapriya V.;Kim S.H.;Ponnusamy K.;Arunadevi N.;Chitra S.;Prabakaran M.;Gopiraman M, *Chemical Engineering Communications*, 2021
5. Inhibitory effect of biowaste on copper corrosion in 1 M HCl solution, Hemapriya V.;Chung I.M.;Kim S.H.;Prabakaran M., *Materials Today Communications*, 2021
6. Utilization of biowaste as an eco-friendly biodegradable corrosion inhibitor for mild steel in 1 mol/L HCl solution, Hemapriya V.;Prabakaran M.;Chitra S.;Swathika M.;Kim S.H.;Chung I.M., *Arabian Journal of Chemistry*,2020
7. Floxacins: as Mediators in Enhancing the Corrosion Inhibition Efficiency of Natural Polymer Dextrin, Devi G.N.;Unnisa C.B.N.;Roopan S.M.;Hemapriya V.;Chitra S.;Chung I.M.;Kim S.H.;Prabakaran M., *Macromolecular Research*,2020
8. Inhibition of mild steel corrosion using *Magnolia kobus* extract in sulphuric acid medium, Chung I.M.;Malathy R.;Priyadarshini R.;Hemapriya V.;Kim S.H.;Prabakaran M.,2020
9. Biosynthetic Greener Move Towards Nanosized Silver By *Diospyros Montana* Leaf Extract And Their Antimicrobial And Antioxidant Activities, Kanchana. P, Arunadevi. N, Hemapriya. V, Shanmuga Sundari. S, Prabha Devi. B, *International Journal Of Recent Technology And Engineering (IJRTE)*, 2020
10. Anti-corrosive potential of *Cyperus rotundus* as a viable corrosion inhibitor for mild steel in sulphuric acid, Anitha R.;Nusrath Unnisa C.B.;Hemapriya V.;Mohana Roopan S.;Chitra S.;Chung I.M.;Kim S.H.;Mayakrishn, *Pigment and Resin Technology*,2020
11. Active-polyphenolic-compounds-rich green inhibitor for the surface protection of low carbon steel in acidic medium, Chung I.M.;Hemapriya V.;Kanchana P.;Arunadevi N.;Chitra S.;Kim S.H.;Prabakaran M., *Surface Review and Letters*, 2020
12. Anticorrosive potential of ethanol extract of *Delonix elata* for mild steel in 0.5 M H<sub>2</sub>SO<sub>4</sub> - a green approach, Mahalakshmi D.;Unnisa C.B.N.;Hemapriya V.;Subramaniam E.P.;Roopan S.M.;Chitra S.;Chung I.M.;Kim S.H, Prabakaran M *Bulgarian Chemical Communications*, 2019

13. Corrosion inhibition behavior of benzothiazine derivative on low carbon steel in acid medium: Adsorption and quantum chemical investigations, Hemapriya V.;Chung I.M.;Parameswari K.;Chitra S.;Kim S.H.;Prabakaran M. *Surface Review and Letters*, 2019
14. Electrochemical and nonelectrochemical analyses of cardo polyesters at the metal/0.5 M H<sub>2</sub>SO<sub>4</sub> interface for corrosion protection, Unnisa C.B.N.;Chitra S.;Nirmala Devi G.;Kiruthika A.;Roopan S.M.;Hemapriya V.;Chung I.M.;Kim S.H.; Prabakaran M, *Research on Chemical Intermediates*, 2019
15. Implications of eco-addition inhibitor to mitigate corrosion in reinforced steel embedded in concrete, Anitha R.;Chitra S.;Hemapriya V.;Chung I.M.;Kim S.H.;Prabakaran M., *Construction and Building Materials*, 2019
16. Synergistic effect of antibiotics on the inhibition property of aminothiazolyl coumarin for corrosion of mild steel in 0.5 M H<sub>2</sub>SO<sub>4</sub>, Mahalakshmi D.;Hemapriya V.;Subramaniam E.P.;Chitra S., *Journal of Molecular Liquids*, 2019
17. Evaluation of Antioxidant and Anticorrosion Properties of Epipremnum aureum, Prabakaran M.;Hemapriya V.;Kim S.H.;Chung I.M.. *Arabian Journal for Science and Engineering*, 2019
18. Linear polyesters as effective corrosion inhibitors for steel rebars in chloride induced alkaline medium – An electrochemical approach, Basha Nusrath Unnisa C.;Nirmala Devi G.;Hemapriya V.;Chitra S.;Chung I.M.;Kim S.H.;Prabakaran M., *Construction and Building Materials*, 2018
19. Assessment of low carbon steel corrosion inhibition by eco-friendly green chaenomeles sinensis extract in acid medium, Chung I.M.;Hemapriya V.;Ponnusamy K.;Arunadevi N.;Chitra S.;Hee-Youn C.;Kim S.H.;Prabakaran M., *Journal of Electrochemical Science and Technology*, 2018
20. Experimental and theoretical studies on inhibition of benzothiazines against corrosion of mild steel in acidic medium, Hemapriya V.;Prabakaran M.;Parameswari K.;Chitra S.;Kim S.H.;Chung I.M., *Anti Corrosion Methods and Materials*, 2017
21. Experimental and theoretical studies on inhibition of benzothiazines against corrosion of mild steel in acidic medium, Hemapriya V.;Prabakaran M.;Parameswari K.;Chitra S.;Kim S.H.;Chung I.M., *Anti Corrosion Methods and Materials*, 2017
22. Aster koraiensis as nontoxic corrosion inhibitor for mild steel in sulfuric acid Prabakaran M.;Kim S.H.;Mugila N.;Hemapriya V.;Parameswari K.;Chitra S.;Chung I.M., *Journal of Industrial and Engineering Chemistry*, 2017
23. Rhus verniciflua as a green corrosion inhibitor for mild steel in 1 M H<sub>2</sub>SO<sub>4</sub>, Prabakaran M.;Kim S.H.;Hemapriya V.;Gopiraman M.;Kim I.S.;Chung I.M., *Rsc Advances*, 2016,
24. Highly efficient Ligularia fischeri green extract for the protection against corrosion of mild steel in acidic medium: Electrochemical and spectroscopic investigations, Prabakaran M.;Kim S.H.;Kalaiselvi K.;Hemapriya V.;Chung I.M., *Journal of the Taiwan Institute of Chemical Engineers*, 2016
25. Tragia plukenetii extract as an eco-friendly inhibitor for mild steel corrosion in HCl 1 M acidic medium, Prabakaran M.;Kim S.H.;Hemapriya V.;Chung I.M., *Research on Chemical Intermediates*, 2016
26. Evaluation of polyphenol composition and anti-corrosion properties of Cryptostegia grandiflora plant extract on mild steel in acidic medium,Prabakaran M.;Kim S.H.;Hemapriya V.;Chung I.M.,*Journal of*

## Industrial and Engineering Chemistry 2016

27. Dry and wet lab analysis on benzofused heterocyclic compounds as effective corrosion inhibitors for mild steel in acidic medium, Hemapriya V.;Prabakaran M.;Parameswari K.;Chitra S.;Kim S.H.;Chung I.M.,Journal of Industrial and Engineering Chemistry, 2016

### Other Publications: International/National

[1]. Synthesis, Characterization, Antimicrobial activity and DNA binding studies of hydrazine complexes of Pyridine-4-carboxylic acid, P.Kanchana , V.Hemapriya , A.Sangeedha , V.Bhuvaneswari , R.Anu, International Journal of Chemistry and Applications, 2015

[2]. Anti-corrosion properties of benzothiazole derivatives for mild steel in 1M H<sub>2</sub>SO<sub>4</sub> solution, V Hemapriya, K Parameswari, S Chitra, Chemical Science Reviews and Letters, 2014

[3] INHIBITING EFFECTS OF BENZOTHIAZOLE AMINE SCHIFF BASES ON THE CORROSION OF MILD STEEL IN ACID ENVIRONMENT, Hemapriya .V, Parameswari .K, Chitra. S, International Journal of Recent Scientific Research, 2014

[4] Inhibition Effects and Theoretical studies of Pyrazolidine-Diones as Corrosion Inhibitors for Mild Steel in 1M H<sub>2</sub>SO<sub>4</sub> Solution, Hemapriya .V , Saranya .P , Parameswari .K and Chitra .S,International Journal of Current Engineering and Technology , 2014

[5] Corrosion behavior of mild steel in hydrochloric acid solution in presence of nicotinic acid derivatives, Hemapriya .V, Savithri .K, Parameswari .K, Chitra .S, International Journal of Current Research, 2014,

[6] The inhibition effect of thiazine compounds towards the corrosion of mild steel in sulphuric acid media, Hemapriya V.;Parameswari K.;Bharathy G., Rasayan Journal of Chemistry, 2012

### Patent

NIL

### Acted as a Resource Person

- Resource Person in Faculty Development Programme on “Road Map to Outcome Based Education (OBE) & Its Implementation” on 11<sup>th</sup> june 2025 at Sree Saraswathi Thyagaraja College

### Reviewer in journal

- Rasayan Journal of Chemistry

### Paper Presentations in Conference /Seminar

### International : 4

### National : 16

### Participation in Conference /Seminar

Conference : 8  
Seminars : 10

### Participation in Workshop

Workshop : 18  
Faculty Development Programme : 4

### Conference/Seminar/Workshop Organized

- The Art of Defining Research Problem/Questions and Awareness on Intellectual Properties Rights, one day workshop at PSGRKCW as a convener, Oct 24<sup>th</sup> 2019
- “Scholarly Publication, Citation, Impact Factor, Plagiarism and Reference Management Tools for Research” one day workshop at PSGRKCW as a convener, Feb 11<sup>th</sup> 2019

### Grants

S.NO.	Project title	Name of the agency	Amount (in Lakhs)	Status
1	Utilisation of bio-waste as eco-friendly biodegradable corrosion inhibitor for metals in acid media	GRG Trust	1.00	Completed
2	Use of novel benzothiazole derivatives as corrosion inhibitors for metals	UGC	1.10	Completed
3	Antimicrobial screening and DNA binding studies of novel hydrazinium complexe	UGC Money from the institution)	1.40	Completed

## Awards/Honors

Awards/Honors	Agency/Institute	Year of Award
Award	“BEST PAPER AWARD” for the research “Experimental and quantum chemical benzofused heterocyclic compounds corrosion inhibitors for mild steel in 11th International corrosion symposium scholars (CORSYM-2015) organized International NIGIS South Zone at IIT-Madras from 31 <sup>st</sup> July – 2 <sup>nd</sup> Aug 2015	2015-2016
Award	“ BEST FACULTY AWARD” from P S G College for Women, for the academic years 2022-2023 and 2024-2025	2022-2023 and 2024-2025
Award	“WOMEN OF WORTH AWARD” from P S G College, Coimbatore, 2025	2024-02025

## Indexing and Citations

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