



Malnad College of Engineering, Hassan  
(An Autonomous Institute, Affiliated to V.T.U, Belagavi)

**Faculty Biodata**

**GENERAL INFORMATION AND ACADEMIC BACKGROUND**

**PART-A**

1.	Name (in Block Letters)	<b>Dr. PRADEEP KUMAR C.B.</b>
2.	Qualification	<b>M.Sc., Ph.D., KSET</b>
3.	Date of joining the service at MCE	<b>19-08-2018</b>
4.	Department	<b>Chemistry</b>
5.	Current Designation & Experience in MCE	<b>Assistant Professor</b>
6.	<b>Teaching Experience:</b> P.G. (in Years) :	<b>9 Yrs., 3 M</b>
<b>Research Experience (in Years)</b>		
7.	<b>a) Total Number of years</b> <b>b) Years spent in M. Phil. / Ph.D.</b> <b>c) Years of Guiding Ph.D. / M. Phil.</b> <b>d) Total No. of papers Published in</b> i. International Journals ii. National Journals iii. Conference Proceedings <b>e) Total No. of</b> <b>    Conferences/Seminar/Workshop</b> <b>    Attended</b> i. International ii. National iii. State Level	<b>13 Yrs.,</b> <b>3 Yrs.,</b> <b>Nil</b>  <b>39</b> <b>02</b> <b>00</b>  <b>02</b> <b>04</b> <b>21</b>
8.	<b>Awards /Prizes/ Honor's / Recognitions</b>	<b>Nil</b>
9.	<b>Fields of Specialization under the Subject / Discipline</b>	<b>Corrosion inhibition studies &amp; Synthetic organic chemistry</b>
10.	<b>Orientation/Refresher Course/Summer School / Winter School/Workshops attended:</b>	<b>06</b>

**PART-B**

**1. List of Publications:**

Sl. No.	Title	Name of the Journal, Vol. No., Year	ISSN Number
1.	“Electrochemical and thermodynamic studies to evaluate the inhibition effect of synthesized piperidine derivatives on the corrosion of mild steel in acidic medium”	Ionics, 21(1), 263 – 281, 2015, (IF: 2.39 – Springer, SCI Indexed).	0947-7047
2.	“Corrosion inhibition efficiency and adsorption characteristics of some Schiff bases at mild steel/hydrochloric acid interface”,	Journal of Taiwan Institute of Chemical Engineers, 45(3): 1031-1042, 2014 (IF: 4.79 – Elsevier, (SCIE Indexed).	1876-1070
3.	“Phytochemical screening and corrosion inhibitive behavior of <i>Pterolobium hexapetalum</i> and <i>Celosia argentea</i> plant extracts on mild steel in industrial water medium”,	Egyptian Journal of Petroleum, 23(3): 201-211, 2014 (Elsevier, (Cite score- 7.4, Scopus Indexed).	1110-0621
4.	“Synthesis of thiazole based 1,3,4-oxadiazole derivatives and their corrosion inhibition characteristics at mild steel/hydrochloric acid interface”,	Journal of Chemical and Pharmaceutical Research, 5(10): 289-305, 2013 (Scopus Indexed)	0975-7384
5.	“Corrosion inhibition effect and adsorption behavior of nicotinamide derivatives on mild steel in hydrochloric acid solution”	International Journal of Industrial Chemistry, 5:19, 2014. DOI: 10.1007/s40090-014-0019-3 (Springer, SCI Indexed)	---
6.	“Adsorption and thermodynamic characteristics of <i>Plumeria rubra</i> plant extracts on mild steel corrosion in industrial water medium”	International Research Journal of Pure and Applied Chemistry, 3(4): 330-346, 2013.	2231-3443
7.	“The effect of <i>Achyranthes aspera</i> extracts on mild steel corrosion in industrial water medium”	ISRN Corrosion, Volume 2013, Article ID 261847, 2013.	2090-8903

8.	“Synthesis and antioxidant activity of 2-amino-5-methylthiazol derivatives containing 1,3,4-oxadiazole-2-thiol moiety”.	ISRN Organic Chemistry, Volume 2013, Article ID 620718, 8	2090-5157
9.	“The inhibition of mild steel corrosion in sulfuric acid by new dapsone derivatives”	Advances in Chemistry, 10(3): 2388 – 2402. 2014	2576-3768
10.	“Synthesis, adsorption, thermodynamic studies and corrosion inhibition behaviour of isoniazide derivatives on mild steel in hydrochloric acid solution”	ISOR Journal of Applied Chemistry, 8(4): 07-19, 2015	2278-5736
11.	“Corrosion inhibition behaviour and adsorption characteristics of dapsone derivatives on mild steel in acid medium”	American Chemical Science Journal, 8(2): 1-16, 2015	2249-0205
12.	“Adsorption and antimicrobial studies of chemically bonded magnetic graphene oxide – fe <sub>3</sub> o <sub>4</sub> nanocomposites for water purification”	Journal of Water Process and Purification, 17, 22-31, 2017(IF: 5.485 – Elsevier, SCI Indexed)	2214-7144
13.	"Fluorine substituted thiomethyl pyrimidine derivatives as efficient inhibitors for mild steel corrosion in hydrochloric acid solution: Thermodynamic, electrochemical and DFT studies"	Journal of Molecular Liquids, 311 (2020) 113311(IF: 6.633, Elsevier, SCI Indexed)	0167-7322
14.	Effect of OH, NH <sub>2</sub> and OCH <sub>3</sub> groups on the corrosion inhibition efficacy of three new 2,4,5-trisubstituted imidazole derivatives on mild steel in acidic solutions: Experimental, surface and DFT explorations	, Journal of Molecular Liquids, 329 (2021) 115587. (IF: 6.633, Elsevier, SCI Indexed)	0167-7322
15.	“Protection of mild steel corrosion by three new quinazoline derivatives: experimental and DFT studies”	Surfaces & Interfaces, 18 (2020) 100446 (IF: 6.137, Elsevier, SCI Indexed)	2468-0230
16.	“Investigation of biological excellence of 2,3-disubstituted quinazolin-4(1H)-ones against Mycobacterium tuberculosis and DNA using docking, spectroscopic and DFT studies”	New Journal of Chemistry, 2021, <b>45</b> , 403 - 414, (IF: 3.925, Royal Society of Chemistry, SCI Indexed)	1369-9261
17.	"MoS <sub>2</sub> -Calix[4]arene catalyzed synthesis and molecular docking study of 2,4,5-trisubstituted imidazoles as potent inhibitors of Mycobacterium tuberculosis"	ACS combinatorial Science, 2020, 22, 10, 509–518 (IF: 3.38, American Chemical Society, SCI Indexed)	---
18.	“Click synthesis of 1,2,3-triazole based imidazoles: Antitubercular evaluation,	Bioorganic and Medicinal Chemistry Letters, 36 (2021)	1464-3405

	molecular docking and HSA binding studies”	127810. (IF: 2.94, Elsevier, SCI Indexed)	
19.	“Discovery of a novel series of substituted quinolones acting as anticancer agents and selective EDNR blocker: Molecular docking study,	Bioorganic and Medicinal Chemistry Letters, 44 (2021) 128118, (IF: 2.94, Elsevier, SCI Indexed)	1464-3405
20.	"Synthesis, characterization and biological evaluation of novel 3-(4-chlorophenyl)-2 (substituted)quinazolin-4(3h)-one derivatives as multi-target anti-inflammatory agents"	Journal of Heterocyclic Chemistry, 56, 2046-2051, 2019 (IF: 2.035-Wiley, SCI Indexed).	1943-5193
21.	“Microwave-assisted N-alkylation of amines with alcohols catalyzed by MnCl <sub>2</sub> : Anticancer, docking, and DFT studies.”	Archiv der Pharmazie, 355, 5, 2022(IF: 4.613, Elsevier, SCI Indexed).	1521-4184
22.	“Novel 1,3,5-triazine based pyrazole derivatives as potential antitumor agents and EGFR kinase inhibitors: Synthesis, cytotoxicity, DNA binding, molecular docking and DFT studies”	New Journal Chemistry, 2021,. (IF: 3.925, Royal Society of Chemistry, SCI Indexed).	1369-9261
23.	“Novel nano corrosion inhibitor, integrated zinc titanate nano particles: synthesis, characterization, thermodynamic and electrochemical studies”	Surfaces & Interfaces, 22 (1008120) 2020 (IF: 6.137, Elsevier, SCI Indexed).	2468-0230
24.	“Adsorption of Anionic Dye on Eco-Friendly Synthesised Reduced Graphene Oxide Anchored with Lanthanum Aluminate: Isotherms, Kinetics and Statistical Error Analysis”	Ceramics international, 47, 10322-10331, 2021 (IF: 5.532, Elsevier, SCI Indexed).	1873-3956
25.	“Facile green synthesis of boroncarbonitride using orange peel: Its application in high performance super capacitors and detection of levodopa in real samples”,	Material Today Communications, 24 (2020) 101033 (IF: 3.662, Elsevier, SCI Indexed).	2352-4928
26.	“functionalization of polyaniline with boroncarbonitride as potential multipurpose photocatalyst: Generation of hydrogen, organic and inorganic pollutant detoxification”.	Nano - Structures & Nano-Objects, 25 (2021) 100667. (Elsevier, Scopus Indexed).	2352-507X
27.	"One-pot Synthesis of 2,3-disubstituted quinazolin-4(1H)-ones via a RuO <sub>2</sub> Nanoparticle Catalyzed Cyclocondensation Method"	Vietnam Journal of Chemistry, 57, 585 – 594 (Wiley, Web of Science Indexed).	2572-8288
28.	“Synthesis, Characterization and Antioxidant Activity of Novel 3-(2,5-dioxo-imidazolidin-1-yl)-1,1-diethyl-urea Derivatives”	Chemical Science Transactions, 2019, 8(4), 487- 492.	2278-3318

29.	“N-doped reduced graphene oxide anchored with Ta <sub>2</sub> O <sub>5</sub> for energy and environmental remediation: Efficient light-driven hydrogen evolution and simultaneous degradation of textile dyes,	Advanced Powder Technology, 32 (2021) 2202-2212 (IF: 4.969, Elsevier, SCI Indexed).	0921-8831
30.	,”Experimental and DFT explorations of tert-butyl(1-(2-(4-nitrobenzylidene) -hydrazinyl)-1-oxopropan-2yl)-carbamate on CRCA metal in 1M HCl solution,”	Results in Surfaces and Interfaces, 5, 2021, 100023 (Scopus indexed)	2666-8459
31.	“Nitrogen doped carbon spheres from Tamarindus indica shell decorated with vanadium pentoxide; photoelectrochemical water splitting, photochemical hydrogen evolution & degradation of Bisphenol A,”	Chemosphere, 287, 2022, 132348 (IF: 8.943, Elsevier, SCI Indexed).	0045-6535
32.	“Design, synthesis and molecular docking studies of imidazole and benzimidazole linked ethionamide derivatives as inhibitors of InhA and antituberculosis agents,”	Bioorganic & Medicinal Chemistry Letters, 60, 2022, 128604. (IF: 2.94, Elsevier, SCI Indexed).	1464-3405
33.	“Design and synthesis of novel benzimidazole linked thiazole derivatives as promising inhibitors of drug-resistant tuberculosis,”	Journal of Molecular Structure, 1269, 2022, 133822. (IF: 3.841, Elsevier, SCI Indexed).	0022-2860
34.	“Facile green synthesis of samarium sesquioxide nanoparticle as a quencher for biologically active imidazole analogues: Computational and experimental insights,”	Journal of Molecular Structure, 1264, 2022, 133235. (IF: 3.841, Elsevier, SCI Indexed).	0022-2860
35.	“Synthesis, characterization, antimicrobial and interaction studies of pteridines with human serum albumin: A combined multi-spectroscopic and computational study,”	Journal of Molecular Structure, 1250, 2022, 131857. (IF: 3.841, Elsevier, SCI Indexed).	0022-2860
36.	“Experimental and theoretical examinations of triazole linked saccharin derivatives as organic corrosion inhibitors for mild steel in hydrochloric acid”	Journal of Molecular Structure, 2022, Article in press (IF: 3.841, Elsevier, SCI Indexed).	0022-2860
37.	“Fabrication of FeVO <sub>4</sub> /RGO Nanocomposite: An Amperometric Probe for Sensitive Detection of Methyl Parathion in Green Beans and Solar Light-Induced Degradation”	ACS Omega, Article in press, (IF: 4.132, ACS, SCI Indexed).	2470-1343

38.	“Anti-corrosive and anti-microbial activity of MTMI on CRCA metal”, Journal of Molecular Structure, 1292, 2023, 136106,	Journal of Molecular Structure, 2022, Article in press (IF: 3.841, Elsevier, SCI Indexed).	0022-2860
39.	“Design, synthesis and molecular docking studies of 5,6-difluoro-1H-benzo[d]imidazole derivatives as effective binders to GABAA receptor with potent anticonvulsant activity”.	Journal of Molecular Structure, Volume 1285, 2023, 135502, (IF: 3.841, Elsevier, SCI Indexed).	0022-2860
40.	“Potential sustainable electrochemical corrosion inhibition study of Citrus limetta on mild steel surface in aggressive acidic media”,	Journal of Materials Research and Technology, 24, 2023, 984-994, (IF: 6.4, Elsevier, SCI Indexed).	2238-7854
41.	”Tailoring the bandgap of zinc indium sulfide/boroncarbonitride heterostructure for efficient photocatalytic CO2 reduction,	Journal of Environmental Chemical Engineering, 11(5), 2023, 110867, (IF: 7.7, Elsevier, SCI Indexed).	2213-3437

2. **Responsibilities in the Department and Institute / University:** (DAC,DPC, BOS, BOE etc., Institutional Governance responsibilities like, Dean, Chief warden, Warden, HOD's, School/Centre Chairperson, IQAC Coordinator etc.)

Sl. No	Responsibilities
1.	Member – BOE Chemistry
2.	Member- BOS Chemistry
3.	Member – DAC Chemistry
4.	Member – Anti-ragging Committee
5.	NBA – Department Coordinator
6.	NAAC – Department Coordinator
7.	CDC Member
8.	Website coordinator
9.	Course coordinator
10.	Contineo coordinator
11.	Inter-Disciplinary Student Project Committee member

3. **Details of Teaching Related Activities**

Sl. No.	Academic Year	(B. E/M.Tech)	Course Title
01	2018-2019 2019-2020 2020-2021 2021-2022 (CH101/201)	B.E.	
02	2022-2023 (22CHES12, 22CHEE22)	B.E.	
03	2023-2024	B.E.	

