

Curriculum Vitae



Name : **Dr.P.Krishna moorthy**
Designation : Asst. Professor in Chemistry
Date of Birth : 21-01-1969.
Community : BC (Hindu Nadar)
Educational Qualification : **M.Sc. M.Phil., M.Ed., Ph.D. in Chemistry**

B. Academic Qualification

Examinations & year	Subject	Div/ class	% of marks	School/college	Name of the board/university
X STD 1984	General	I	75.4	S.H.N.Edward Higher Secondary School, Sattur.	BOARD OF SEC. EXAMS TAMIL NADU
HSC 1986	Mathematics, Physics, Chemistry, Biology	I	60.2	S.H.N.Edward Higher Secondary School, Sattur	BOARD OF HIGHER SEC. EXAMINATION S TAMIL NADU
B.Sc 1989	Chemistry	I	74.0	S.B.K.College, Aruppukottai	MADURAI KAMARAJ UNIVERSITY
M.Sc. 1991	Chemistry	I	62.5	V.H.N.S.N. College, Virudhunagar	MADURAI KAMARAJ UNIVERSITY
M.Phil 1995	General Chemistry	I	73.6	ANJA College, Sivakasi	MADURAI KAMARAJ UNIVERSITY
M.Ed 1994	Physical Sciences	I	64.1	Madurai kamaraj University, Madurai.	MADURAI KAMARAJ UNIVERSITY
Ph.D 2005	Studies in differential settling of Bidisperse suspensions	-	-	Anna University, Chennai.	ANNA UNIVERSITY

Title of PhD thesis: Studies in differential settling of Bidisperse suspensions.

Total Teaching Experience : 19 years and 9 months

Private College Experience : 13 years and 9 months

Government Service : 6 years

Experience and Course taught:

1. Handled Physical chemistry, Inorganic chemistry for M.Sc, and B.Sc chemistry classes in P.M.T.College, Melanelithanallur, Sankarankovil.during June 1993- june 1994 (One year).
2. Handled Physical chemistry,Inorganic chemistry for M.Sc,and B.Sc chemistry classes in S.V.N.College, Madurai during june 1995- Feb 1996. (Nine months).
3. Handled Engineering Chemistry for B.E/ B.TECH, Organic and Physical Chemistry for B.Tech (Chemical) Inorganic, Organic, Applied Chemical Technology for B.Tech(Leather Technology) In Priyadarshini Engineering College,Vaniyambadi during June 1996- May 2005 (8 Years and nine Months)
4. Engineering Chemistry for B.E/ B.TECH in St.Joseph's College of Engineering during July 2005- June 2009 (Four years)
5. Handled Physical chemistry, Inorganic chemistry for M.Sc,and B.Sc **chemistry** and Allied chemistry classes in Government Arts College during August 2009 to till date. (Five Years and Nine months)

Research Experience (in years) : 10 years

Details of guidance : Ph.D Guided – 2
Ph.D Guiding - 2
M.Phil Guided - 2

Major/Minor Research Proposal Applied:

1. UGC Major Research Project Applied
Reference :MRP-Major-chem-2014-48517
2. Minor Rsearch project proposal submitted in
Tamilnadu State Council for Higher Education.
Reference : D.O.Rc No.:1083/2015A dated 21.08.2015
Title : A novel approach to growth and characterization of semi-organic non-linear optical materials.

Research Publications in International and national Journals

1. **P.Krishnamoorthy**, I.Regupathy, T.Murugesan ., An Experimental study and Correlation for differential settling of Bidisperse suspensions,Journal of Chemical and Biochemical Engineering,

21 ,145-150 , (2007).

2. **P.Krishnamoorthy***, T.Murugesan ., Development of Empirical Correlation for differential settling of Bidisperse suspensions based on Monodisperse equations covering wide range in Solid-Liquid Concentration, *Oriental Journal of Chemistry* ,Vol.23(3),909-917,(2007).
3. S.Karthikeyan, **P.Krishnamoorthy**, R.Rajasekaran and S.Karthik, Spectroscopic study of characterisation of commercial drug paracetamol, *Journal of Acta Ciencia indica*,Vol.XXXIV,(3) P.No.419-426,(2008).
4. **P.Krishnamoorthy***, Sedimentation Model and analysis for differential settling of two-particle size suspensions in the Stokes region, *International journal of sediment Research*,Vol.25,No.2,pp.1-15 (2010).
5. **P.Krishnamoorthy***, Kinetics and mechanism of oxidation of Isopropylchloroacetate by Chromic acid, *International Journal of Physical Chemistry Ultra Science* Vol.20(3),447-454 (2008).
6. S. Shree Devi., **P. Krishnamoorthy*** ., B. Muthukumaran ., Oxidation of 5-(4'-fluorophenyl)-5-oxopentanoic Acid by Acid Permanganate ,*Oxidation Communications*, Vol. 37, No 2,P.No., 440–444 (2014).
7. E.Porselvi, **P.Krishnamoorthy***, Adsorption of direct dye brown MR from aqueous solutions by vegetable Waste, *Indian research review*, Vol.3, issue 4,p.no 1-4 (2012).
8. E.Porselvi, **P.Krishnamoorthy***, Adsorption removal of Rhodamine-B by agricultural Waste, *Oriental international research journal of chemistry* Vol.29(No. 2),719-723 (2013).
9. E.Porselvi, **P.Krishnamoorthy***, Removal of Acid Yellow by Agricultural Waste, *International Journal of Material and environmental science*. Vol.5, issue 2 page.No.408-415 (2014).
10. Shree devi.S ,Muthukumaran.B and **Krishnamoorthy.P***, Perborate oxidation of substituted 5-oxoacids in aqueous acetic acid medium: a kinetic and mechanical study, *ISRN physical chemistry*,Hindawi publishing corporation Volume 10.1155, Article ID 924827, page No.(1 -7) (2014).
11. Shree devi.S ,Muthukumaran.B and **Krishnamoorthy.P***, Vanadium (V) catalysis of perborate oxidation of substituted 5-Oxo acids in aqueous acetic acid medium: a kinetic and mechanistic study , *Ionics*, Springer-Verlag Berlin Heidelberg, DOI 10.1007/s11581-014-1135-y, (2014).
12. S. Shree Devi, B. Muthukumaran and **P. Krishnamoorthy**, “Ru(III) catalysis in perborate oxidation of 5-oxo acids: A Catalytic Approach” (2014) *Advances in Physical Chemistry/ Hindawi Publishing Corporation*, Article ID 879608,14 pages. <http://dx.doi.org/10.1155/2014/879608>, Volume (2014).
13. H.Jayasantha kumari ,T.K.Arumugam , **P.Krishnamoorthy*** , “ Adsorption of basic dye on low cost Typha Latifolia Bioremediator Stem Carbon: Isotherm, Kinetic and Equilibrium Studies” *International journal of Advance research in Science and Engineering*, Vol.No.4, Issue No.01 , Page 246-256 , January (2015).
14. H.Jayasantha kumari , T.K.Arumugam, **P.Krishnamoorthy***, “Kinetics, Thermodynamics and Isotherm studies on the Removal of Chromium by Typha latifolia bioremediator Stem Carbon” (2015), *Journal of Material and Environmental Science*, 6 (6) , 1532-1541 , (2015).

15. S,Shree devi , **P.Krishnamoorthy** , B.Muthukumaran ., Iron (II) catalysis in perborate oxidation 5-oxo acids , International journal of Chemtech Research, Vol.7 , No.7 , pp 2902-2910 , (2015).
16. H.Jayasanthakumari., **P.krishnamoorthy***., T.K.Arumugam., Removal of Rhodamine B from aqueous solution by Activated carbon prepared from the Natural plant Typhalatifolia by adsorption: Kinetic and Isotherm study, International Journal of Chemtech Research, Vol.7 ,No.7, pp 2867-2874 , (2015) .
17. N. R. Rajagopalan , **P. Krishnamoorthy*** , Synthesis and analysis of pure and Zn²⁺ doped Tetrakis thiourea barium chloride: Non linear optical single crystals ,International Journal of Science ,Technology & Management , Volume No:04, Special issue No.01, pp. 723-731, (2015).
18. N. R. Rajagopalan , **P. Krishnamoorthy*** , Growth and characterization of pure and Ca²⁺ doped tetrakis thiourea barium chloride : semi organic nonlinear optical crystals ,International Journal of Advanced Chemical Science and Applications , Volume No:03, Special issue No.01, pp. 01 – 05 , (2015).
19. N. R. Rajagopalan , **P. Krishnamoorthy*** , Spectral,Thermal,Electrical,mechanical and optical studies on pure and Mg²⁺ doped tetrakis thiourea barium chloride :semi organic nonlinear optical single crystals ,International Journal of Frontiers in Science and Technology , Volume No:03, Issue No.03, pp. 124 – 135 , (2015).
20. Rajagopalan N.R; **krishnamoorthy P***, contemporary studies on growth and characterization of bis (thiourea) strontium chloride – A potential optoelectronic NLO material, Optik – International journal of Light and Electron Optics (Elsevier publication), Ms.Ref.No.:ULEO-D-15-01369. (Accepted - Article in Press).

List of papers Communicated

1. Rajagopalan N.R; **krishnamoorthy P**, A renaissance approach to physic-chemical analysis of bis (thiourea) strontium chloride – An organometallic nonlinear optical crystals, Journal of Advanced Research (Elsevier publication) (Communicated).

List of papers published in international and national conferences

1. “Fundamental Models for settling of binary suspensions” presented in the international conference on The challenges and strategies for the sustainability of safe drinking water held at Gandhi gram Rural university, Gandhi gram, Tamilnadu, India during October 2006.
2. “Experimental study and correlations for differential settling of binary suspensions” presented in the International conference on 8th Asian Academic Network in Environmental safety and waste management held at Anna university, Chennai, India during December 2006.
3. “IR Spectral analysis of settling of monodisperse starch suspensions” presented in the National conference on Recent Advances in Vibrational Spectroscopy held at Periyar University, Salem, Tamilnadu, India during January 2007
4. “Model and IR Spectral analysis of settling of same density particle in monodisperse starch suspensions with metal additives” presented in the National conference on Recent Advances in molecular structure held at Vinayaga Missions University,Palyanoor , Tamilnadu, India during July 2007.

5. "Sedimentation of polydisperse suspensions covering wide range in concentration" presented in the National conference on Frontiers of Chemistry held at SRM University, Kattankulathur, Tamilnadu, India during January 2008.
6. **Participated** Workshop on Chromatographic Techniques organized by Department of Analytical Chemistry, University of Madras, Chennai -600 025
7. **Participated** National Conference on Advances in Materials science (NCAMS-2008) organized by B.S. Abdur Rahman Crescent Engineering College, Chennai-600 048.
8. **Participated** in the National Seminar on Thrust Areas in Chemistry (STAC-2012) held at the Department of Chemistry, Government Arts College (Men), Nandanam, Chennai-600 035.
9. **Participated** National seminar on The Concepts of Green Chemistry organized by The Department of Chemistry, Valliammai Engineering College, SRM Nagar, Kattankulathur-603 203.
10. E.Porselvi., **P.Krishnamoorthy**. Removal of hazardous Rhodamine-B from aqueous solution by Agricultural Waste, paper presented in the International Conference On Recent Trends in Engineering, Management & Computer Applications (INRTIEMC – 2012) held on 24th February 2012 at Pallavan College of Engineering, Kanchipuram.
11. E.Porselvi., **P.Krishnamoorthy**., Utilising Agricultural Waste for dye adsorption, paper presented in the National Conference On Recent Trends in Engineering, Management & Computer Applications (NRTIEMC – 2012) held on 23rd and 24th May 2012 at Pallavan College of Engineering, Kanchipuram.
12. H.Jayasantha kumari , T.K.Arumugam , **P.Krishnamoorthy**, " Adsorption of Basic Dye on Low cost Typha latifolia bioremediator Stem Carbon: Isotherm, Kinetic and Equilibrium Studies ,(RACE-2014) held on 21st November 2014 at SRM University (Guindy Campus), Chennai.
13. Rajagopalan N.R; **krishnamoorthy P**, Spectral, thermal, electrical, mechanical and optical studies on pure and Mg²⁺ doped tetrakis thiourea barium chloride: semi organic nonlinear optical single crystals, NCFCE-2015, National Conference dated 27 and 28th March on Frontiers in Chemistry and Environment held in the Department of Chemistry ,C, Abdul Hakeem College of Engg.&Technology, Melvisharam 632 509.
14. N. R. Rajagopalan , **P. Krishnamoorthy** , Synthesis and analysis of pure and Zn²⁺ doped Tetrakis thiourea barium chloride: Non linear optical single crystals , Presented paper in International Conference on Recent Trends in Engineering Science and Management, ICRTESM/JNU/2015/768
15. H.Jayasanthakumari., **P.krishnamoorthy**., T.K.Arumugam., Removal of Rhodamine B from aqueous solution by Activated carbon prepared from the Natural plant Typhalatifolia by adsorption: Kinetic and Isotherm study, ICEWEST-2015, Presented paper in the International Conference held in Presidency College dated 05-02-2015.

Books Published

1. A Text Book of Engineering Chemistry by **Dr.P.Krishnamoorthy**. Dhanam Publications, Chennai -42, First Edition June 2008. ISBN Number. 81-89843-19-2.
2. A Text Book of Engineering Chemistry-I by **Dr.P.Krishnamoorthy**. Tata Mc-Graw Hill Education Private Limited, New Delhi -110 008, First Edition, 2012., ISBN Number(13 digit). 978-0-0-7-132875-3.
3. A Text Book of Engineering Chemistry-I by **Dr.P.Krishnamoorthy**. Tata Mc-Graw Hill Education Private Limited, New Delhi -110 008, Second Edition, 2014, ISBN Number(13 digit). 978-93-3920-550-8.
4. A Text Book of Engineering Chemistry-II by **Dr.P.Krishnamoorthy**. Tata Mc-Graw Hill Education Private Limited, New Delhi -110 008, First Edition, 2014 (Book in Press).

Present Working address : Asst.Professor
P.G & Research Department of Chemistry
Dr.Ambedkar Govt.Arts College (Autonomous)
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Anugraha Flats
Ganthinagar First Main Road
Keelkattalai, Chennai-600 117
Kancheepuram District
Tamilnadu, India.

Short-term Course/Work shop

1. Attended a short-term course in “Organometallic chemistry and catalysis held at **Indian Institute of Science, Bangalore**, India during March 2003

• DETAILS OF TECHNICAL REVIEWER IN JOURNALS

Serving as technical Reviewer/Referee in the following journals:

1. Journal of Environmental Chemical Engineering.
2. International Research Journal of Pure and Applied Chemistry
3. American Chemical science journal.
4. International Journal of Biological macromolecules.
5. British journal of pharmaceutical Research .
6. British Journal of Applied Science and Technology
7. Journal of Applied chemical Science International
8. International Journal of Agricultural Policy and Research
9. Industrial & Engineering Chemistry Research(ACS)
10. Journal of Science Research and Reports
11. Physical Science international Journal
12. Journal of Applied physical Science international
13. Journal of Basic and Applied Research International
14. Archives of Current Research International
15. International Research Journal of Medicine and Biomedical Science
16. Journal of Scientific Research and Reports
17. British Biotechnology Journal
18. Journal of Geography, Environment and Earth science international
19. Industrial & Engineering Chemistry Research
20. International Journal of Biochemistry Research and Review
21. Journal of Global ecology and Environment
22. International Journal of Research in Chemistry and Environment
23. Arabian journal of Chemistry

Papers Reviewed

1. A comparative Evaluation of Biological Activated Carbon and Activated Sludge Processes for the Treatment of Tannery Wastewater, Manuscript Number: JECE-D-14-00343, International Journal of Environmental Chemical Engineering.
2. Redox kinetics and Mechanism of the Oxidation of Thiourea by Diaquotetrakis(2, 2'-Bipyridine)- μ - Oxodiruthenium (III) ion ,in aqueous perchloric acid, Manuscript Number:2014_IRJPAC_11517, International Research Journal of Pure and Applied Chemistry.
3. Kinetics and Mechanism of the reaction of Malachite Green and Dithionite ion, Manuscript Number: 2014_ACSj_12427, American chemical Science Journal.
4. Separation of macromolecular proteins and rejection of toxic heavy metal ions by PEI/cSMM blend UF membranes, Manuscript Number: IJBIOMAC-D-14-00919, International Journal of Biological macromolecules,
5. Conformational stability of 5-substituted orotic acid derivatives analysed by measuring ^{13}C NMR Chemical shifts and applying linear free energy relationships, manuscript number: 2014_BJPR_12541, British journal of pharmaceutical science.

6. The Electron Transfer Reaction of 3, 7-Bis (dimethylamino)phenazothionium Chloride with Benzenethiol in Aqueous Nitric Acid: A Mechanistic Approach, Manuscript Number: 2014 _ ACSj _ 11703, American Chemical Science Journal.
7. Artificial Photosynthesis Energy, Manuscript Number: IJAPR-14-132, International journal of Agricultural policy and Research.
8. Effect of N-phthaloyl Chitosan on antifouling and separation performance of Polyetherimide Membranes, Manuscript Number: IJBIOMAC-D-14-01287, International Journal of Biological Macromolecules.
9. Synthesis and Studies of Diphenin , Manuscript Number: 2014_IRJPAC_9022 , International Research Journal of Pure and Applied Chemistry.
10. Kinetics and Mechanism of the reaction of Malachite Green and dithionite ion, Manuscript Number: 2014/IRJPAC/12428, International Research Journal of Pure and Applied Chemistry.
11. Corrosion Inhibition behavoiur of Ketosulphide for mild steel in acidic acid medium, Manuscript Number: pp-1114-304, International Research Journal of Chemistry.
12. The Catalytic activity of two and three component systems introduced redox inactive metal Compounds list and additive of monodentate ligands modifiers: DMF,HMPA and phoH in selective Ethyl Benzene oxidation with dioxygen, Manuscript Number : 2014_BJAST_15778, British journal of Applied Science and Technology.
13. Application of Biological Adsorbent Materials for Removal of Harmful inorganic Contaminents from aqueous media- An overview , Manuscript number : 2014_JACSI_483, Journal of Applied Chemical Science International.
14. An selective determination Ag(I): Kinetic Catalytic effect of Ag(I) on redox reaction of Acetophenone phenyl hydrazone derivative with H₂O₂, Journal of Applied Chemical Science International.
15. Spectroscopic studies of newly synthesized Cu (II) complexes of furfural isonicotinoyl hydrazone (FINH), manuscript number 2014_JACSI_609, Journal of Applied Chemical Science International.
16. Supercapacitor electrode material based on Nickel Vanadium Oxide, Manuscript Number 2014_ACSj_15866, American Chemical Science journal.
17. Bis (p-amino benzoate) bis (hexadecanoato) dicopper (II) a low temperature and thermally stable functional metallomesogen , Manuscript Number 2015_IRJPAC_16266, International Research Journal of Pure and Applied chemistry.
18. Study of Iron (III) oxidative electrophilic coupling reaction and its exploitation in iron (III) determination spectrophotometrically in environmental field , waters,soils and industrial effluent samples, Manuscript Number 2015_JACSI_687 , Journal of Applied Chemical Science International.
19. Water droplet condensate removal from gas channels using corrugated Walls, Manuscript Number: 2015_IRJPAC_16413, International Research Journal of Pure and Applied chemistry.
20. Effects of PVP on the separation performance and antifouling property of poly (etherimide) ultrafiltration membranes,Manuscript id : 2015_004329, Industrial& Engineering Chemistry research.
21. Synthesis of new 4-(dimethyl amino benhydrazide derivatives and their cyclization to 1,3 benzo-thiazin-4-one moiety, Manuscript number: 2015_ACSj_16728, American Chemical Science Journal.
22. Methanol and ethanol electro-oxidation onto platinum loaded reduced graphene oxide surface for Fuel cell applications , Manuscript Number: 2015_BJAST_16808, British Journal of Applied Science & Technology.
23. Electrochemical oxidation of Phenol using nanocrystalline Nickel ferrite electrode, Manuscript Number : 2015_JACSI_834 , Journal of Applied Chemical Science International.
24. Strategies for ensuring the performance sustainability of cirate reservoir using soft system methodology(SSM), Manuscript Number :2015_JSRR16870 , Journal of Scientific Research and Reports.

25. Kinetics of Cobalt catalysed oxidation of Acetamide by BAT, Manuscript Number: 2015_PSIJ_17005, Physical Science international Journal.
26. Evaluation of Biological Activity of some Benzimidazole derivatives as antifungal, Manuscript Number: 2015_IRJPAC_17011, International Research Journal of Pure and Applied Chemistry.
27. Analytical description of section geometric for LiNbO₃ by modeling the internal distribution of the electric field, Manuscript Number: 2015_JAPSI_715, Journal of applied physical Science International.
28. Spectral study of aggregation behavior of Remazol Brilliant Violet-5R dye in Cationic ligand solution. Manuscript Number: 2015_ACSj_17172, American Chemical Science Journal.
29. Optimization of the preparation of hydrophobic isotactic polypropylene flat sheet membrane by response surface methodology design, Manuscript Number:2015_JSRR_17277, Journal of Scientific Research and Report.
30. Synthesis of 13-Aryl-indeno (1,2-b)-naphtha[1,2-e] pyran-12(13H)-ones using Fe(ClO₄)/ SiO₂ under solvent free condition, Manuscript Number: 2015_JOBARI_1108, Journal of Basic and Applied Research International.
31. A highly efficient green synthesis of 1H-Pyrazolo[1,2-b] phthalazine -5-10-diones catalyzed by boehmite nanoparticles, Manuscript Number:2015_JACSI_1123, Journal of Applied Chemical Science International.
32. Review of Energy and economic assessment of membrane distillation for water purification, Manuscript Number: 2015_JACSI_1169, Journal of Applied Chemical Science International.
33. Mechanism of Iodate oxidation of methylthionium chloride in acidic medium, Manuscript Number:2015_ACSj_17482, American Chemical Science Journal.
34. Adsorption and Corrosion inhibition characteristics of some Thiophene-3-carbohygrazide derivatives on low carbon steel in hydrochloric acid solutions, Manuscript Number:2015_IRJPAC_17491, International Research journal of pure and applied chemistry.
35. Polymer Additives for High Quality Coating Obtainment, Manuscript Number:2015_JACSI_1254, Journal of Applied chemical Science International.
36. Synthesis and characterization of Metal complexes of Derivative of 1,10, phenanthroline, Manuscript Number : 2015_IRJPAC_18137, International Research Journal of Pure and Applied Chemistry.
37. Corrosion inhibition behavior and adsorption characteristics of Dapsone Derivatives on mild steel in sulphuric acid solution, Manuscript Number:2015_ACSj_18211, American Chemical Science Journal.
38. Synthesis of 3, 4,5 – Trihydroxy benzohydrazone and evaluation of their Urease inhibition Potential, Manuscript Number: ARABJC – D-15-00406, Arabian Journal of Chemistry.
39. Optimization of Oxidation for the decolourisation of textile Dyes, Manuscript Number : 2015_JSRR_18280, Journal of Scientific Research and Report.
40. Spectrophotometric Study of Oxidation Kinetics and Mechanism of Losartan potassium using N-Chlorosuccinimide, Manuscript Number : 2015_IRJPAC_18332, International Research Journal Of Pure and Applied Chemistry.
41. Spectroscopic Investigation and Magnetic study of iron, Manganese, Copper and cobalt doped Hydroxyapatite Nanopowders, Manuscript Number : Ms.PSIj_18676, Physical Science international Journal.
42. Synthesis, Characterisation, Theoretical Studies and biological activities of mixed Ligand Complexes of Cr(III), Mn(II), Co(II), Ni(II) and Cu(II) with 2-Hydroxy benzaldehyde and oxalic acid, Manuscript Number:2015_ACSj_18588, American Chemical Science Journal.
43. Synthesis and Crystal structure of a linear Trinuclear Cobalt cluster with Pyridine – 2- amidoxime, Manuscript Number: Ms_JSRR_18793, Journal of scientific Research and Report.
44. Spectroscopic investigation and magnetic study of iron, Manganese, Copper and Cobalt doped Hydroxyapatite Nanopowders, Manuscript Number: Ms.PSIj_18676, physical Science International journal.
45. Synthesis and characterization of 1-Vinyl-1,2,4-Triazole functional Proton Exchange membranes

- (PEMs) based on interpenetrating polymer networks (IPNS) for use in polymer electrolyte membrane Fuel Cells (PEMFCS) , Manuscript Number: Ms_ACSj_18669 , American Chemical Science Journal.
46. Visualization Management of innovative Processes in 4D space, Manuscript Number:2015_JOBARI_1543 , Journal of Basic and Applied Research International.
 47. Impact of Parent Zirconia crystallinity / Amorphicity on the n-heptane isomerisation over Pt/WO₃-ZrO₂ catalsts , Manuscript Number:2015_BJAST_18557 , British Journal of Applied Science and Technology.
 48. Degradation of some resistant organic compounds during pressure decomposition with Nitric acid – Pottasium chlorate reagent solution , Manuscript Number: Ms_IRJPAC_18714 , International Research Journal of Pure and applied Chemistry.
 49. Polar Diels – Alder Reactions using Heterocycles as Electrophiles- Influence of Microwave irradiation , Manuscript Number: Ms_IRJPAC_18867 , International Research Journal of Pure and applied Chemistry.
 50. Synthesis and antioxidant properties of 5-ethoxy carbonyl-6-methyl-4-alkyl(arial)-1-N-alkyl(aryl)-3,4-dihydropyrimidine -2(1H)-tions, Manuscript Number: Ms_ACSj_18894 , American Chemical Science Journal.
 51. Solid dispersion based on poloxamer 188 improves the dissolution rate of trandolapril , a poorly water-soluble ACE inhibitor , Manuscript Number : Ms_BJPR-19008 , British Journal of Pharmaceutical Research.
 52. Measuring Porosity of anodes in solid oxide fuel cell (SOFC) through water Archimedean Porosimetry, Manuscript Number : Ms_IRJPAC_19114 , International Research Journal of Pure and Applied Chemistry.
 53. The Mechanism study of transparent interdigitated electrodes dust removal experiment, Manuscript Number: Ms_Psij_19531, Physical Science International Journal.
 54. A Novel spectrophotometric determination of carbaryl present in various environmental samples, Manuscript Number: Ms_Jacsi_1862, Journal of Applied Chemical Science International.
 55. Removal of Methylene blue using cellulose nanocrystal synthesized from cotton by ultrasonic technique, Manuscript Number: Ms_Acsj_20031, American Chemical Science Journal.
 56. Equilibrium, isotherm, kinetics and thermodynamic study of Cr(VI) onto soil, contaminated from waste water of textile industry, Manuscript Number: IJRCE 1117, International Journal of Research in chemistry and Environment.
 57. Synthesis of new cyanuric chloride derivatives, Manuscript Number: Ms_IRJPAC_20466, International Journal of pure and applied chemistry.
 58. Biocompatible, biodegradable peptides for heavy metals toxicity removal, Manuscript Number: Ms_Jacsi_1819, Journal of applied Chemical Science International.
 59. phase transfer synthesis of novel based surfactants: Role of biocorrosion inhibition, Manuscript Number: Ms_JSRR_20128, Journal of Scientific Research and Report.
 60. Synthesis , characterization, antibacterial and cytotoxic assay of zinc oxide (ZnO) nanoparticles, Manuscript Number: Ms_BBJ_20260, British Biotechnology Journal.
 61. Comparison of analytical technique in the characterization of complex compounds. Manuscript Number: Ms_Acsj_20257, American Chemical Science journal.
 62. Electro chemical study of the corrosion behavior of mild steel with zinc complexes of 1-(8-hydroxy quinoline-2yl)-methyl thiourea as inhibitor in sodium chloride solution, Manuscript Number: Ms_JACSI_2031, Journal of Applied chemical science international.
 63. Development and validation of spectrophotometric method for the determination of picloram, Manuscript Number: Ms_Acsj_20407, American Chemical Science journal.
 64. The effectiveness of bacterial consortium in bioremediation of textile waste water, Manuscript Number: 2015_JOGEE_2036, Journal of global ecology and environment.
 65. Purification and characterization of endoglucanase from sorghum (*S.bicolor*) and Millet (*Pennisetum typhoides* and *Digitaria exillis*) malts, Manuscript Number: Ms_IJBcRR_20593, International journal of Biochemistry Research & Review.

66. Electrochemical determination of Carbon-Carbon double bond containing pesticide residues in environmental matrices, Manuscript Number: Ms_JOBARI_2097, Journal of Basic and Applied Research international.
67. Survey of efficiency agricultural waste as adsorbent to removal of p-cresol from aqueous solution, Manuscript Number: Ms_IRJPAC_20507, International Research journal of Pure and applied Chemistry.
68. Theoretical study of the efficiency of some nitro benzenamine derivatives in acidic medium to serve as excellent organic corrosion inhibitors of mild steel, Manuscript Number: Ms_IRJPAC_20772, International Research journal of Pure and applied Chemistry.
69. Antioxidant, antifungal and phytotoxic activities of ethyl acetate soluble fraction and purified compound from *Lonicera quinquelocularis*, Manuscript Number: Ms_IJBCRR_20811, International journal of Biochemistry Research & review.
70. Catalytic degradation of refinery petroleum waste water using complex and nanocomposite of cationic polyelectrolyte, Manuscript Number: Ms_JOBARI_2273, Journal of Basic and Applied Research international.
71. One pot synthesis of tetra substitutedimidazole derivatives by condensation reaction using zeolite H-ZSM22 as heterogeneous catalyst, Manuscript Number: Ms_IRJPAC_21443, International Research journal of Pure and applied Chemistry.
72. Kinetic model fitting for anaerobic co-digestion of chibuku brewery waste with cow dung, Manuscript Number: Ms_JACSI_2292, journal of Applied Chemical Science International
73. Study of the rate of Zinc consumption during Sacrificial cathodic protection of the bottom of crude oil storage tank, Manuscript Number: Ms_JACSI_2322, Journal of Applied chemical science international.
74. Synthesis and characterisation of PEGylated reduced graphene oxide: Determination of toxicity using bone marrow mesenchymal stem cell, Manuscript Number: Ms_JACSI_2420, Journal of Applied chemical science international.
75. Development and validation of a method for the determination of moexipril in pharmaceutical preparations, Manuscript Number: Ms_JACSI_2468, Journal of Applied chemical science international.
76. Removal of BSA and HA contaminants from aqueous solution using Amphiphilic tri-block copolymer modified polyetherimide UF membrane and their fouling behaviours, Manuscript Number: 2015-03290d, Industrial & Engineering Chemistry Research.
77. Effect of PVA/PVOH concentration on characteristics of super porous hydrogel, Manuscript Number: MS_ACSj_221127, American Chemical Science Journal.
78. In vitro study of antioxidant and anticoagulant activities of ethanol extract of *pandanus tectorius* leaves, Manuscript Number: MS_IBRR_22231, International Blood Research & Review.
79. An review of the legal status of strategic environmental assessment (SEA) practice of application and challenges in India, Manuscript Number: STR_JGEESI_21798, Journal of Geography, Environment and earth science International.
80. Adsorption capability of balanite *aegyptiaca* in dye removal, Manuscript Number: MS_BBT_22234, British biotechnology journal.
81. The synthesis of Atomoxetine containing carboxamides – potential human carbonic anhydrase inhibitors, Manuscript Number: MS_ACSj_22245, American Chemical Science Journal.
82. Co^{2+} , Ni^{2+} , Cu^{2+} , Zn^{2+} , Cd^{2+} and Hg^{2+} complexes butanedione hydrazones : spectroscopic thermal and biological studies, Manuscript Number: MS_ACSj_22592, American Chemical Science Journal.
83. A survey of Radiation Level associated with exposure to power – line in some selected areas in Ibadan metropolis oyo state, Nigeria, Manuscript Number: MS_PSIJ_22828, Physical science international journal.
84. Surface coating on steel pipes used in oil and gas industries – a review, Manuscript Number: MS_ACSj_22790, American Chemical Science Journal

85. Donor – C – based polymers for application in solar cells, Manuscript Number:MS_PSiJ_23070, Physical Science International Journal.
86. Photo and photo fenton like catalytic degradations of Malachite green in waste water using magnetically separable $ZnFe_2O_4$ – reduced graphene oxide hybrid nano structures, Manuscript Number: MS_JSRR_23103, Journal of Scientific Research and Review.
87. Corrosion inhibition and adsorption properties of prosopis juliflora leaves for the corrosion of milled steel in 0.1 M HCl Solution, Manuscript Number:MS_ACSj_23101, American Chemical Science Journal
88. Synthesis of new N-substituted nalidixic acid hydrazide derivatives, Manuscript Number: MS_ACSj_23144, American Chemical Science Journal.
89. Physiological effect of chromium exposure, Manuscript Number:IRJMBS-15-014, International Research Journal of Medicine and biomedical science.
90. Green synthesis and characterisation of silver nano particles using mimuscopselengi flower extract and its synergistic antimicrobial potential, Manuscript Number:MS_ACSj_23161, American Chemical Science Journal.
91. Spectroscopic characterization and molecular modeling of bioactive pyridine carboxylamide complexes, Manuscript Number:MS-JACSI_3016, Journal of Applied Chemical Science International.
92. Effect of mineral systems on mercury removal from aqueous solution part-2, Manuscript Number:MS_JACSI_3003, Journal of Applied Chemical Science International.
93. Synthesis of new pyrrolidine – 1,2 - dicarboxamides and investigations of their activities in the synthesis of aminonitrils, Manuscript Number:MS_ACSj_23201, American Chemical Science Journal.
94. Generation, composition and some physico chemical characteristic of municipal solid waste in Ilorin-Nigeria, Manuscript Number:MS_IRJPAC_23204, International Research Journal of Pure and Applied Chemistry.
95. Synthesis characterisation and antimicrobial activity of some transition complexes with new Schiff base derived from saccharine, Manuscript Number:MS_IRJPAC_23188, International Research Journal of Pure and Applied Chemistry.
96. Synthesis spectral and antimicrobial analysis of acetic acid catalysed semicarbazone derivatives of N-nitroso-2-6-diphenyl piperidin – 4 – one, Manuscript Number:MS_ACRI_23187, Archives of current research international.
97. Novel theoretical estimates of the proton rest mass energy and radius, Manuscript Number:MS_PSIJ_22990, Physical Science International Journal.
98. Preparation and characterisation of some new complexes of Schiff bases derived from benzoin and glycine, Manuscript Number:MS-ACSj_23274, American Chemical Science Journal.
99. A Chito-specific, adenine binding agglutinin from benincasa hispida shows high structural and functional stability, Manuscript Number:MS_IJBCRR_23270, International Journal of Biochemistry Research and Review.
100. Removal of acid alizarin black dye from aqua solution by adsorption using zinc oxide, Manuscript Number:MS_IRJPAC_23251, International Research Journal of Pure and Applied Chemistry.
101. Spatial assessment of water and sediment quality in Burullus lake using GIS Technique, Manuscript Number:MS_JGEESI_23311, Journal of Geography environment and earth science international.

Research Activities

Research Guidance			
Doctor of Philosophy			
Sl.No.	Name of the student	Title of the Thesis	Year of completion
1.	Mrs.E.Porselvi	Adsorption studies on removal of dyes from aqueous solution using activated carbon prepared from agricultural waste materials.	2015
2.	Mrs.S.Shree Devi	Metal ion catalysis in perborate oxidation of 5-oxo acids.	2015
Master of Philosophy			
Sl.No.	Name of the student	Title of the Thesis	Year of completion
1.	Mr. S.Sanjeevi	Adsorption studies of rice husk activated carbon and RHAC/Chitosan composite for the removal of Rhodamine-B from aqueous solution.	2015
2.	Mr.Gnanavel	Adsorption studies of coconut shell carbon and CAC/Chitosan composite for the removal of Malachite green dye from aqueous solution. (Acted as Co-Guide)	2015

Academic Activities

1. Doctoral committee member for Ph.D Degree programme in Anna University
2. Guiding M.Phil (Chemistry) in Madras University (No.D2/M.phil / GUIDE/2014/1450).
3. B Certificate Holder in NCC ,No : TN,P&A/SO/86/27531 Rank : CPL, Unit 28 (TN) BN NCC, Virudhunagar,Ncc Directorate- Tamilnadu,Pondicherry&Andamans-Madras-9. Certificate issued under the authority of Ministry of Defence,Government of India.
4. Member in ISTE
5. Participated in the **ORIENTATION COURSE** (Intensive Training Programme) from 09-07-2009 to 05-08-2009 organized by Tamilnadu State Council for Higher Education and UGC- Academic Staff college,University of Madras.
6. Participated in the UGC sponsored **REFRESHER COURSE IN CHEMISTRY** from 11.08.2011 to 31.08.2011 held in Academic Staff College,University of Madras,Chennai -5.
7. Acted as JUDGE in Department of School Education Chengalpattu Educational District Science Exhibition 2013-2014 conducted by School Education Department, Government of Tamilnadu on 25-10-2013 held at St.Theresa Hr.Sec.School,Pallavaram.
8. Acted as JUDGE in Department of School Education Chengalpattu Educational District Science exhibition 2014-2015 conducted by School Education Department, Government of Tamilnadu on 21-08-2014 held at Tambaram Grace King Girls Hr.Sec.School, Tambaram.

9. Participated in the XXVII AIFUCTO STATUTORY Conference 2013 held at Loyola Hall, St. Aloysius College (Autonomous), Mangalore, Karnataka from November 30 to December 2, 2013.
10. Participated in the XXIX Academic Conference and National Seminar on Quality in Higher Education: Issues and Challenges organized by the Punjab and Chandigarh College Teachers Union from November 14-16, 2014.
11. Participated in the state level seminar on Thrust Areas in Chemistry (STAC-2015) held at The Department of Chemistry, Government Arts College (Men), Autonomous, Nandanam, Chennai-600 035 on March 2015.
12. Participated in the XXVIII AIFUCTO STATUTORY Conference & National Seminar in New higher education policy: Challenges & Prospects 18-20 December 2015 organised by the Gujarat University Area Teachers Association (GUATA) in association with GLS University from December 18-20, 2015.

Academic Awards

1.	<p>Outstanding Faculty Award for the contribution and achievement in the field of CHEMISTRY based on the recommendation of Expert committee report and Apex committee, Venus International Foundation (VIFFA 2015), Nomination Code: F. No./ VIFFA 2015/239, Award code : OFA / M / Sci./ Chem./ VIFFA 2015.</p>
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Current Research Work/ Research Area:

1. Preparation and characterization of Composite membranes used in the purification of Contaminated air, Water and fuel cells.
2. Poly disperses sedimentation of same density particle of various sizes in different fluids at low Reynolds number.
3. Spectral analysis of settling studies with metal additives in mono disperses starch suspensions.
4. Sedimentation in Environmental Studies.
5. Adsorption studies in Bio degradable biopolymer based adsorbent to remove various dyes in industrial waste and metals removal in bio samples.
6. NLO crystal Growth and characterization and its stability in oxidative Atmosphere.
7. Reaction Kinetics studies using eco friendly oxidants.
8. Preparation of inorganic nano particle and its applications.
9. Green Synthesis of Silver Nano particles using Natural plants and their antiplasmodial activities, antimicrobial activity and cytotoxic effect.
