

CURRICULUM VITAE



Name : Dr. M. N. ARUMUGHAM

Designation : Professor

Official Address : Department of Chemistry,
Thiruvalluvar University,
Serkadu, Vellore – 632 115.

Field of Specialization : Inorganic Biochemistry

Research Areas

- **Synthesis of metal surfactant complexes using cobalt as a metal and dodecylamine as a surfactant ligand – Photochemistry – Electrochemistry.**
- **DNA interaction with metal complexes.**
- **Phthalocyanine and Metallophthalocyanine Synthesis, Solar, Non-linear optical and Sensor Studies. .**

Education

- Ph.D., Chemistry (1997), Bharathidasan University
- M. Sc., Chemistry (1991), Madras University
- B. Sc., Chemistry (1983), Madras University

Teaching Experience

- June 1995 - Sep 25, 1997: Lecturer Department of Biochemistry J. J. College of Arts & Science, Pudukkottai.
- Sep 26, 1997 – Apr 30, 2000: Lecturer Department of Chemistry ,Arunai Engineering College Tiruvannamalai – 606 603.
- June, 2000 – Nov 23, 2000: Senior Lecturer Department of Chemistry Priyadarshini Engineering College, Vaniyambadi.
- Nov 24, 2000 – Dec.21, 2007 : Senior Lecturer Department of Chemistry Vellore Institute of Technology Deemed University Vellore – 632 014.
- Dec 26, 2007- Nov 25, 2010: Assistant Professor, Department of Chemistry, Muthurangam Govt. Arts college, Vellore – 632 002.

- Nov 26, 2010 to Nov 25, 2013: Associate Professor of Chemistry, Thiruvalluvar University, Serkadu, Vellore – 632 115.
- Nov 26, 2013 to till date: Professor of Chemistry, Thiruvalluvar University, Serkadu, Vellore – 632 115.

S.No	Academic Credentials	
1.	No. of papers published in reputed journals	32
2.	No. of papers presented in conferences	National : 53, International: 25
3.	Conferences/ Seminars conducted	In the capacity of Organizing Secretary: 01
4.	Research guidance	Ph.D., Degree Awarded : 01
		Thesis Submitted : 07
		Presently guiding : 05
5.	No. of M.Phil., scholars	Awarded: 17
		Guiding : 01
6.	h – index	09
7.	i-10 index	09

Project Details

S. No.	Title & Ref. No	Status	Cost (in lakhs)	Agency
1	Meso Heteroaromatic Porphyring: Synthesis and Physicochemical, Non-Linear Optical and Biological Studies. ERIP/ER/0403465/M/803 Dated 23.08.2005	Completed	14.837	DRDO
2.	Phthalocyanines and Metallophthalocyanines Synthesis, Physicochemical, Non Linear Optics, Sensor and Solar Studies. ERIP/ER/0804439/M/01/1222 Dated 21 st April 2010	Completed	16.356	DRDO

Active Reviewer for the following journals

- European Journal of Medicinal Chemistry
- Journal of Inorganic Biochemistry
- Journal of Coordination Chemistry

List of Publications

33. M. Murali Krishnan, S. Baskaran, **M.N. Arumugham**, Synthesis, characterization and photochemical properties of non-peripherally dodecyloxy substituted phthalocyanines. *J. Porphyr. Phthalocyanines*. (2016). (communicated)
32. S. Baskaran, M. Murali Krishnan, **M.N. Arumugham** DFT analysis and DNA binding, cleavage of copper(II) complexes, *J. Molec. Liq.*, 2016 (Accepted).
31. S. Baskaran, M. Murali Krishnan, **M.N. Arumugham**, Synthesis, crystal structure, DNA binding, cleavage and cytotoxicity, antimicrobial activity of new copper(II) complex with L-ornithine and 1,10-phenanthroline. *Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry*, 2016. (Accepted).
30. S. Baskaran, M. Murali Krishnan, **M.N. Arumugham**, Synthesis and DNA studies of a copper(II) complex of 5,6-dihydro- 5,6-epoxy- 1,10-phenanthroline. *J Coord. Chem.*, 68 (2015) 4395.
29. D. Kannan and **M.N. Arumugham**, Synthesis, Characterisation, DNA-Binding Studies and antimicrobial activity of Copper(II) Complex with 2,2'Bipyridine, L-Tyrosine and Thiourea as Ligands. *Elixir Appl. Chem.* 74 (2014) 27015-27020.
28. D. Kannan and **M.N. Arumugham**, Synthesis, Characterisation, DNA-Binding Studies and antimicrobial activity of Copper (II) Complex with 1,10 Phenanthroline, L-Tyrosine and Thiosemicarbazide as Ligands. *Elixir Appl. Chem.* 74 (2014) 27007-27014.
27. L. Selvarani and **M.N. Arumugam**, Synthesis, Characterization, DNA binding studies and biological activities of a copper(II) complex containing of 1,10 phenanthroline, L. Alanine and urea. *Elixir Appl. Chem.* 74 (2014) 27002-27006.
26. H. Gopinathan, M.N. Arumugham, Larvicidal activity of synthesized copper(II) complexes against *Culex quinquefasciatus* and *Anopheles subpictus*. *Journal of Taibah University for Science*, 9 (2015) 27–33.
25. H. Gopinathan, N. Komathi, M.N. Arumugham, Synthesis, structure, DNA binding, cleavage and biological activity of cobalt (III) complexes derived from triethylenetetramine and 1,10 phenanthroline ligands. *Inorganica Chimica Acta* 416 (2014) 93–101.
24. S. Caleb Noble Chandar, D. Sangeetha, **M. N. Arumugham**, Octadecylamine cobalt(III) dimethyl glyoximate complexes: synthesis, thermodynamics of micellization, steady-state photolysis and biological activities. *Transition Met Chem* (2014) 39:159–165.
23. D. Kannan, **M.N. Arumugham**, Synthesis, Characterisation, DNA-Binding Studies and antimicrobial activity of Copper(II) Complex with 1,10 Phenanthroline, L-Tyrosine and Semicarbazide as Ligands. *International Journal of Inorganic and Bioinorganic*

Chemistry, 3, 44, 2013.

22. D. Kannan, **M.N. Arumugham**, Synthesis, Characterisation, DNA-Binding Studies and antimicrobial activity of Copper(II) Complex with 1,10 Phenanthroline, L-Tyrosine Urea as Ligands. *International Journal of Inorganic and Bioinorganic Chemistry*, 3, 8, 2013.
21. D. Kannan, **M.N. Arumugham**, Synthesis, Characterisation, DNA-Binding Studies and antimicrobial activity of Copper (II) Complex with 1, 10 Phenanthroline, L-Tyrosine and Ethylamine as Ligands. *International Journal of Inorganic and Bioinorganic Chemistry*, 2, 50, 2012.
20. Harikesavan Gopinathan, A.E. Poornanandhan, **M.N. Arumugham**, Synthesis, characterization, DNA binding and cleavage activity of copper (II) complex of 1,10-phenanthroline with L-Threonine and Ethylamine as ligands and their antimicrobial activity. *International Journal of Inorganic and Bioinorganic Chemistry*, 2, 42, 2012.
19. D. Kannan, **M.N. Arumugham**, Synthesis, Characterisation, DNA-Binding Studies and antimicrobial activity of Copper(II) Complex with 1,10 Phenanthroline, L-Tyrosine and Thiourea as Ligands. *International Journal of Research in Controlled Release*, 2, 10, 2012.
18. P. Santhakumar, **M.N. Arumugham**, Synthesis, Characterization of Copper(II) complex with mixed ligands of 1,10-Phenanthroline, L-Phenylalanine and semicarbazide: Studies on DNA binding nuclease and biological activities. *International Journal of Inorganic and Bioinorganic Chemistry*, 2, 31, 2012.
17. P. Santhakumar **M. N. Arumugham**, Synthesis, Characterization of Copper (II) Complex with Mixed Ligands of 1, 10-phenanthroline, L-Phenylalanine and Thiourea: Studies on DNA Binding, Nuclease and Biological Activities. *International Journal of Chemical and Analytical Science*, 3, 1513, 2012.
16. P. Santhakumar, **M.N. Arumugham**, Synthesis, characterization of copper (II) complex with mixed ligands of 1,10-phenanthroline, L-phenylalanine and ethylamine: studies on DNA binding, nuclease and biological activities. *International Journal of Recent Scientific Research*, Vol.3, Issue, 6, pp.459 -466, June, 2012.
15. S. Caleb Noble Chandar, D. Sangeetha, **M.N. Arumugham**, Micellization of Metallosurfactant N-Dodecyl/Hexadecyl/Octadecyl Salicylaldimin Cobalt(III) Complexes in Nonaqueous Media, *J Solution Chem* (2011) 40: 608–620.
14. S. Caleb Noble Chandar, D. Sangeetha, **M. N. Arumugham**, Synthesis, structure, CMC values, thermodynamics of micellization, steady-state photolysis and biological activities of hexadecylamine cobalt(III) dimethyl glyoximato complexes, *Transition Met Chem* (2011) 36:211–216.
13. S. C. Noble Chandar, K. Santhakumar, **M.N. Arumugham**, Metallosurfactant Schiff base cobalt(III) coordination complexes. Synthesis, characterization, determination of CMC values and biological activities, *Transition Met Chem* (2009) 34:841–848.
12. P. Santhakumar, K., Kumaraguru, N., Arunachalam, S., **Arumugham, M.N.** Thermodynamics and micellar properties of some surface active cobalt (III) metallosurfactants in nonaqueous medium. *International Journal of Chemical Kinetics*, 39 (2007). 22-31.
11. N. Kumaraguru, K.Santhakumar, S. Arunachalam, **M.N. Arumugham**, Synthesis, Characterization and Micellization behaviour of some surface active mixed ligand complexes of Cobalt(III)", *Polyhedron*, **25**, (2006), 3253.

10. K. Santhakumar, N. Kumaraguru, **M.N. Arumugham** and S. Arunachalam Metallomicelles of Co (III) coordination complexes- Synthesis, Characterization and Determination of CMC values, *Polyhedron*, **25**, (2006), 1507-1513.
9. N. Kumaraguru, S. Arunachalam, **M.N. Arumugham**, K.Santhakumar Metallosurfactants of Chromium(III) Coordination Complexes - Synthesis, Characterization and Determination of CMC Values, *Transition metal chemistry*, **31**, (2006), 250-255.
8. K. Santhakumar, N. Kumaraguru, S. Arunachalam and **M.N. Arumugham**, Studies on cobalt(III) metallosurfactants. Kinetics and mechanism of reduction of cobalt (III) by iron (II) in aqueous acid medium, *Transition Metal Chemistry*, **31**, (2006), 62-70.
7. K. Santhakumar, N. Kumaraguru, S. Arunachalam and **M.N. Arumugham** Kinetics of Fe(II) Reduction of cisHalogeno(dodecylamine)-bis(ethylenediamine)cobalt(III) Complex ion in Aqueous Solutions, *International Journal of Chemical Kinetics*, 2006, **38**, (2), 98-105.
6. K. Santhakumar, N. Kumaraguru, S. Arunachalam and **M.N. Arumugham**, Kinetics and the mechanism of iron(II) frduction of cis- α -halogeno (cetylamine) (triethylenetramine) cobalt(III) complex ion in aqueous acid medium, *Transition Metal Chemistry*, **31**, (2006), 475-481.
5. **M.N. Arumugham**, K. Santhakumar and S. Arunachalam, Synthesis and Characterization of Cationic Surfactant Cobalt (III)Complexes containing 3, 8 – Dimethyl – 5, 6 – Benzo –4, 7 – Diazo – 3, 7 – Dinene – 2, 9 – Dinone Dioxime, *Asian Journal of Chemistry*, 2003, **Vol.15**, N0.1, 191-196.
4. K Santhakumar, N.Kumaraguru, **M.N. Arumugham** and S. Arunachalam, Photochemical oxygenation reactions of Cobalt (III) – amine Complexes in aqueous and non-aqueous solvents: Formation of μ – peroxodinuclear complex in Cobalt(II) System”, *Asian Journal of Chemistry*, 2003, **Vol.15**, N0.2, 991-998.
3. K. Panchanatheswaran, **M. N. Arumugham** and S. Arunachalam, Trans – bis (dodecylamine bis (dimethylglyoitmato) Cobalt (II)nitrate, *J. Chem., Cryst*, **28**, (1998), 83.
2. **M. N. Arumugham** and S. Arunachalam, Synthesis and Characterization of some Neutral Amphibathic Cobaloxime Complexes, *Indian J. Chem.*, **36A**, (1997), 315.
1. **M.N. Arumugham** and S. Arunachalam, “Synthesis and Characterization of some Surfactant Cobalt (III) Amine Complexes, *Indian J. Chem.*, **36A**, (1997), 84.

Papers Presented in Conferences/workshop/seminar

1. Photochemistry of some Surfactant Cobalt (III) Complexes, Indian photobiology Society IX National Symposium, March 4 & 5, 1994, Centre for Cellular and Molecular Biology, Hyderabad.
2. Charge Transfer Photochemistry of a Cobalt (III) Amine Complex: Micellar Effect, UGC – DRS National Seminar on “New Trends in Dynamic and Structural Studies in Inorganic and Physical Chemistry, March 1-3, 1995, Madurai Kamarajar University, Madurai –625 021.
3. Micellar Effect on the Charge Transfer Photochemistry of some surfactant Cobalt (III) Amine Complexes, Eleventh International Conference on Photochemical conversion and Storage of Solar Energy (IPS – 11), July 28 to August 02, 1996, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore.

4. Photo linkage Isomerism of a Micelle Formable Surfactant Cobalt (III) Amine Complex, Satellite Symposium on Current Trends in Photophysics and Photochemistry, August 5 & 6, 1996, Madurai Kamaraj University, Madurai – 625 021.
5. Crystal and Molecular Structure of the Surfactant Complex Transbis(dodecylamine bis (dimethylglyoximate) Cobalt (III) nitrite, MBU Silver Jubilee symposium on Structural Biology and 24th Annual Meeting of the Indian Biophysical society, Indian Institute of Science, Bangalore, 9 – 12 Decemeber, 1996.
6. Emission quenching of some Cobalt (III) Surfactant Complexes by $\text{Ru}(\text{bpy})_3^{2+}$, Seventeenth Conference on Indian Council of Chemists, Madras, 1998.
7. Steady and Laser flash photolysis- Studies of a surfactant cobalt (III) amine complex in micellar media National seminar on social Relevance of some advanced chemical Research in independent India, 16-17 March 1998, Bharathidasan University, Tiruchirappalli.
8. Emission quenching of some cobalt(III) surfactant complexes by $[\text{Ru}(\text{bpy})_3]^{2+}$. National seminar on social Relevance of some Advanced chemical Research in independent India, 16-17 March 1998, Bharathidasan University, Tiruchirappalli.
9. Micelle forming properties of some surfactant cobalt (III) complexes, National seminar on social Relevance of some Advanced chemical Research in independent India, 16-17 March 1998, Bharathidasan University, Tiruchirappalli.
10. Photoredox Behaviour of a Micelle formable Surfactant Cobalt (III) Amine Complex: Steady and Laser Flash Photolysis studies. Bhaba Atomic Research Center, Mumbai, 1999.
11. The National Seminar on Advances in Industrial waste Treatment, 13-14 January 1999, Nagpur.
12. Workshop on Knowledge engineering and Management, KEM 25-27 June 2001, School of computer Science and Engineering, Anna University, Chennai-25.
13. Synthesis, spectra and biological activities of cationic surfactant cobalt(III) complexes, XXXVth International conference on co-ordination chemistry, 21-26th July 2002, University of Heidelberg, Heidelberg, Germany.
14. Photochemical oxygenation reactions of Cobalt (III) amine complexes in aqueous and non-aqueous solvents, Formation of μ -peroxodinuclear complexes of Cobalt (II). 14th International conference on photochemical conversion and storage of solar energy, 4-7th August 2002. Hokkaido University in Sapporo, Japan.
15. National seminar on Chemistry in the new millennium, 24-25 July 2003, National Institute of technology, Calicut.
16. National conference on, Balancing competing water uses and management, Evaluation of waster water for Irrigation purpose. 27-29 March 2003. , Department of geology, Bharathidasan University, Tiruchirappalli. India.
17. Synthesis and biological activities of some Novel surfactant Cobalt (III) complexes presented in the 40th Annual convention of chemists, Indian chemical society, 24-27 Dec 2003, Bundelhand Univeristy, Jhansi.
18. Synthesis, Spectra, Steady Photolysis and Biological activities of Neutral and Cationic Surfactant Cobaloxime Complexes. 37th International Conference of Co-ordination Chemistry, Aug 13th -18th, 2006, Cope Town, South Africa.
19. Synthesis and Biological activities of Surfactant Schiff's base Compound. International Symposium on Advances in Organic Chemistry (INSOC- 2006) held at Mahatma Gandhi University, Kottayam Kerala, during January 9-12, 2006.

20. Unusual Solvent Dependent Optical Absorption Spectral Properties of Free – Base Meso Halo Porphyrins, National seminar on current development in chemistry, Jan. 18&19, 2007, Bharathiyar University, Coimbatore..
21. Synthesis and characterization of novel surfactant cobaloxime complexes containing hexadecyl amine, National seminar on current development in chemistry, Jan. 18&19, 2007, Bharathiyar University, Coimbatore.
22. Synthesis, Characterization and DNA binding studies of copper (II) complexes with 1,10-phenanthroline, L-tyrosine and Ethylamine ligands, National Conference on Current Trends in Chemistry (NCCTC -10) held at Bharathiar University, 2-3rd December 2010, Coimbatore – 641 046.
23. Synthesis, Characterization, DNA binding studies and biological and Nuclease activities of copper (II) complexes with 1,10-phenanthroline, L-Alanine, National Conference on Current Trends in Chemistry (NCCTC -10) held at Bharathiar University, 2-3rd December 2010, Coimbatore – 641 046.
24. Synthesis, Characterization copper (II) complexe with 1,10-phenanthroline, L-Phenylalaine: Studies on DNA binding and nuclease activity, National Conference on Current Trends in Chemistry (NCCTC -10) held at Bharathiar University, 2-3rd December 2010, Coimbatore – 641 046.
25. Synthesis, Characterization and DNA binding study of 1,10-phenanthroline Cobalt(III) complexes, National Conference on Current Trends in Chemistry (NCCTC -10) held at Bharathiar University, 2-3rd December 2010, Coimbatore – 641 046.
26. Synthesis, Characterization, DNA binding and Cleavage properties of Ternary copper (II) complex of 1,10-phenanthroline, L-Threonine and Ethylamineas ligands and their Antimicrobial Activities, National Conference on Current Trends in Chemistry (NCCTC -10) held at Bharathiar University, 2-3rd December 2010, Coimbatore – 641 046.
27. Synthesis, Characterization and DNA binding studies of cobalt (III) complexes containing of 2,2'- bipyridal, Schiff base, National Conference on Current Trends in Chemistry (NCCTC -10) held at Bharathiar University, 2-3rd December 2010, Coimbatore – 641 046.
28. Synthesis, Characterization, DNA binding and Cleavage properties of Ternary copper (II) complex of 1,10-phenanthroline, L-Threonine and Semicarbazide as ligands and their Antimicrobial Activities, National Conference on Current Trends in Chemistry (NCCTC -10) held at Bharathiar University, 2-3rd December 2010, Coimbatore – 641 046.
29. Synthesis, Structure, DNA binding and antimicrobial studies of Co(III) complex containing triethylenetetramine and 1,10 phenanthroline ligands, International conference on chemistry: Frontiers and challenges, 5-6, March, 2011, Department of Chemistry, Aligarh Muslim University, Aligarh – 202 002.
30. Synthesis, thermodynamics of micellization, Steady state photolysis and Biological activities of octadecylamine cobalt(III) dimethyl gluoximato complexes, International conference on chemistry: Frontiers and challenges, 5-6, March, 2011, Department of Chemistry, Aligarh Muslim University, Aligarh – 202 002.
31. One Day Workshop International Year of Chemistry IYC-2011 - International Level. Organized by Vellore Institute of Technology, Vellore , 7th December 2011.
32. National Seminar on Enhancement of Quality in Research Publications and Recent Research in Water, Alternative Energy Resources, Materials and health “CURIE11” - National Level. Organized by Auxilium College, Vellore , 15-16th December 2011

33. Synthesis, Characterization, DNA binding and Cleavage Properties of Ternary Copper(II) Complex of 1,10-phenanthroline, L-threonine and Thiourea as ligands and their antimicrobial Activities. Recent Advances in Inorganic Chemistry - National Level. Organized by: Bharathidasan University, Trichy & 22-24th March, 2012.
34. National Workshop (STP) Research Methodology - National Level. Organized by Pondicherry University, 2-3 Feb-2012.
35. Synthesis, Characterization and Sensor study of Tetrakis(dodecyloxy)copper(II) phthalocyanine. Internal Conference on Recent Trends in Advanced Materials, February 20-22, 2012. Organized By Vellore Institute of Technology, Vellore.
36. Synthesis, Characterization and Sensor study of Tetrakis(dodecyloxy) phthalocyanine. Internal Conference on Recent Trends in Advanced Materials, February 20-22, 2012. Organized By Vellore Institute of Technology, Vellore.
37. Synthesis, characterization of Copper(II) complex with mixed ligands of 1,10-Phenanthroline, L-Phenylalanine and Thiourea: Studies on DNA binding, Nuclease and Biological Activities. Internal Conference on Recent Trends in Advanced Materials, February 20-22, 2012. Organized By Vellore Institute of Technology, Vellore.
38. Synthesis, Characterization, DNA Binding and cleavage properties of Ternary Copper(II) Complex of 1,10-Phenanthroline, L-Threonine and Thiosemicarbazide as ligands and their antimicrobial Activities. Internal Conference on Recent Trends in Advanced Materials, February 20-22, 2012. Organized By Vellore Institute of Technology, Vellore.
39. Synthesis, Characterization, DNA Binding studies and Antimicrobial Activity of Copper(II) Complexes with 1,10-Phenanthroline, L-Tyrosine and Thiourea as ligands. Internal Conference on Recent Trends in Advanced Materials, February 20-22, 2012. Organized By Vellore Institute of Technology, Vellore.
40. Synthesis, Characterization, DNA binding studies and biological and Nuclease Activities of Copper(II) Complexes containing of 1,10-Phenanthroline and L-Alanine. Internal Conference on Recent Trends in Advanced Materials, February 20-22, 2012. Organized By Vellore Institute of Technology, Vellore.
41. National Conference on Frontiers in Spectroscopy -National Level - International Level. Organized by PG & Research Department of Chemistry, Government Arts College, Thiruvannamalai & 2-3 April 2012.
42. Sensing Applications in LB films of Cobalt(II) Phthalocyanine, Recent Trends in Chemistry (RTC-2012) -Regional Level. Organized by Government Arts College, Chidambaram & 13-14 September 2012.
43. Synthesis, characterization, DNA binding studies and biological activity of a cobalt (III) complex containing the 1, 10- Phenanthroline, o-phenylene diamine, Recent Trends in Chemistry (RTC-2012) - Regional Level. Organized by Government Arts College, Chidambaram & 13-14 September 2012.
44. Synthesis, characterization, DNA binding studies and biological activities of cobalt(III) complexes containing 2,2'-bipyridyl and 8-hydroxyquinoline. Organized by Government Arts College, Chidambaram & 13-14 September 2012.
45. One day State Level Conference on Establishment of Entrepreneurship development Cells in Higher Education Institutions in Tamil Nadu - National Level. Organized by Entrepreneurship Development Institute, Guindy, Chennai – 600032.

46. Synthesis, characterization, DNA binding studies and biological activity of a cobalt (III) complex containing the 1, 10 Phenanthroline, Thiosemicarbazide as Co-Ligand Organized By Banaras Hindu University, Varanasi on 31.01.2013.
47. Micellization of Metallosurfactant N-Dodecyl/Hexadecyl/Octadecyl Salicylaldimine Cobalt(III) Complexes in Non-aqueous media Organized By Banaras Hindu University, Varanasi on 31.01.2013.
48. Synthesis, characterization, DNA binding studies and biological activity of a cobalt (III) complex containing the 1, 10 Phenanthroline, Thiosemicarbazide as Co-Ligand Organized By Banaras Hindu University, Varanasi on 31.01.2013
49. DNA Binding and Biological Activities of Copper(II) Complex, International Conference on Biological Inorganic Chemistry (ICBIC-2013) Organized By Department of chemistry, Periyar University, Salem on 22.02.2013.
50. Synthesis, Structure of Copper (II) Complex of 1, 10-Phenanthroline and L-Ornithine with DNA Binding and DNA Cleavage Activity, International Conference on Emerging Trends In Chemical and Pharmaceutical Sciences (ICCP-2013) Organized by Jawaharlal Nehru Technological University, Anantapur on 28.06.2013.
51. Synthesis, Characterization, DNA Binding and Antitumour Activity against HEPG2 Human Hepatoblastoma Cell Studies of Co(III) Complex Containing 1,10-Phenanthroline and L-Valine. Emerging Concepts and Trends in Bioinorganic Chemistry, (ECTCBC-14) - National Level Organized by National Engineering College, Kovilpatti & 07 - 08th Feb 2014.
52. DNA Binding Studies of Ni(II) complex containing 2,2'-bipyridyl and L-Methionine, Emerging Concepts and Trends in Bioinorganic Chemistry, (ECTCBC-14) - National Level Organized by National Engineering College, Kovilpatti & 07 - 08th Feb 2014.
53. DNA Binding Studies of Ni(II) complex containing 1,10-Phenanthroline and L-Methionine, International conference on emerging frontiers and challenges in chemistry - International Level. Organized by All saints' College, Trivandrum & 17 - 18th February 2014.
54. Synthesis, characterization DNA binding and antitumor activity against HepG2 hepatoblastoma cell studies of Co(III) containing 2,2'bipyridyl and L-Valine, International conference on emerging frontiers and challenges in chemistry - International Level. Organized by All saints' College, Trivandrum & 17 - 18th February 2014.
55. Synthesis, crystal structures and DNA binding studies of a new cobalt (II) asymmetric complex of 1,10-phenanthroline, International conference on emerging frontiers and challenges in chemistry - International Level. Organized by All saints' College, Trivandrum & 17 - 18th February 2014.
56. Solvatochromism of Nickel Phthalocyanine and its protonated Derivative, International conference on emerging frontiers and challenges in chemistry - International Level. Organized by All saints' College, Trivandrum & 17 - 18th February 2014.
57. Workshop on X-Ray Crystallography and its Applications - National Level, Organized by Bharthiar University, Coimbatore & 5-6 March 2014.
58. Emerging Trends in Chemistry - National Level. Organized by Muthurangam Government Arts College, Vellore & 3rd December 2011.
59. Synthesis, crystal structure, DNA binding, cleavage and luminescence properties of a new six-coordinate mixed ligands copper(II) complex of 5,6-dihydro-5,6-epoxy-1,10-phenanthroline International conference on chemistry and materials - International Level Bharathidasan Institute of Technology, Tiruchirappalli & 14 - 15th November 2014.

60. Synthesis, Characterization, DNA Binding of Ternary Copper (II) Complex of 1,10-Phenanthroline, L-Serine and Urea as Ligands. International conference on chemistry and materials - International Level, Bharathidasan Institute of Technology, Tiruchirappalli & 14 - 15th November 2014.
61. Synthesis, crystal structure, DNA binding studies and luminescence properties of a copper(II) complex with 1,10-phenanthroline and 4-aminobenzoate. International conference on chemistry and materials - International Level. Bharathidasan Institute of Technology, Tiruchirappalli & 14 - 15th November 2014.
62. Novel dodecyl substituted copper phthalocyanine chemosensor for detection of acids by inducing aggregation in solution. International conference on chemistry and materials - International Level Bharathidasan Institute of Technology, Tiruchirappalli & 14 - 15th November 2014.
63. DNA Binding Studies of Ni(II) complex containing 1,10-Phenanthroline and Salicylaldehyde. International conference on chemistry and materials - International Level, Bharathidasan Institute of Technology, Tiruchirappalli & 14 - 15th November 2014
64. Novel dodecyl substituted asymmetric phthalocyanine chemosensor by inducing aggregation in solution. 17th CRSI National Symposium in Chemistry - National Level, National Chemical Laboratory, Pune & 06-08 Feb 2014.
65. Synthesis, Characterization, DNA Binding/Cleavage properties of Cobalt(III) Complexes and their Antimicrobial activities 17th CRSI National Symposium in Chemistry - National Level National Chemical Laboratory, Pune & 06-08 Feb 2014.
66. Synthesis, Characterization, DNA Binding and Biological activities of Copper(II) Complex containing Bathophenanthroline and L-Ornithine Ligands. National Conference on Emerging trends in Chemistry and Materials - National Level, Thiruvalluvar University, Vellore & 09-10th April 2015.
67. Synthesis, Characterization and DNA Binding properties of Ternary Copper(II) Complex of 1,10-Phenanthroline, L-Alanine and Semicarbazide as Ligands and their Antimicrobial Activities. National Conference on Emerging trends in Chemistry and Materials - National Level, Thiruvalluvar University, Vellore & 09-10th April 2015.
68. Synthesis, Characterization, DNA Binding and Biological activities of Copper(II) Complex containing Neocuproine and L-Threonine Ligands. National Conference on Emerging trends in Chemistry and Materials - National Level, Thiruvalluvar University, Vellore & 09-10th April 2015.
69. Synthesis, crystal structure, DFT analysis and DNA binding, cleavage, cytotoxicity activity of copper(II) complex [Cu(phen)(L-Ser)H₂O](NO₃). National Conference on Emerging trends in Chemistry and Materials - National Level, Thiruvalluvar University, Vellore & 09-10th April 2015.
70. Synthesis, characterization, DNA binding studies and biological Activities of copper(ii) complex containing 1,10- phenanthroline, L-tryptophan and ethylamine. National Conference on Emerging trends in Chemistry and Materials - National Level, Thiruvalluvar University, Vellore & 09-10th April 2015.
71. DNA Binding Studies of Cu(II) complex containing 2,2'-bipyridyl and L-Valine. National Conference on Emerging trends in Chemistry and Materials, Thiruvalluvar University, Vellore & 09-10th April 2015.
72. Synthesis, Characterization, DNA Binding of Ternary Copper (II) Complex of 1,10-Phenanthroline, L-Serine and Thiourea as Ligands. National Conference on Emerging trends

in Chemistry and Materials - National Level, Thiruvalluvar University, Vellore & 09-10th April 2015.

73. Synthesis, Characterisation, DNA-Binding Studies and antimicrobial activity of Copper(II) Complex with 2,2'Bipyridine, L-Tyrosine and Urea as Ligands. National Conference on Emerging trends in Chemistry and Materials - National Level, Thiruvalluvar University, Vellore & 09-10th April 2015.
74. Synthesis, characterization, DNA binding studies and biological activity of a copper(II) complex containing the 1,10-Phenanthroline, Thiourea as Co-Ligand. National Conference on Emerging trends in Chemistry and Materials - National Level, Thiruvalluvar University, Vellore & 09-10th April 2015.
75. Synthesis, characterization of copper (II) complex with mixed ligands of 1, 10-phenanthroline, L-Phenylalanine and Urea: Studies on DNA binding, nuclease and biological activities. National Conference on Emerging trends in Chemistry and Materials - National Level, Thiruvalluvar University, Vellore & 09-10th April 2015.
76. Synthesis, Characterization, DNA Binding properties of Copper(II) Complexes and their Antimicrobial activities. 10th Mid-Year chemical research society of india symposium in chemistry - National Level, National Institute of Technology, Trichy - July 23-25, 2015.
77. DNA Binding of Ternary Copper(II) Complex of 1,10-Phenanthroline, L-Serine as Ligands. 10th Mid-Year chemical research society of india symposium in chemistry - National Level, National Institute of Technology, Trichy - July 23-25, 2015.
78. Synthesis, Structure, DNA Binding, Cleavage, Molecular Docking And Antimicrobial Activity Of A New Copper(II) Complex Of Bathophanathroline And 1-Methyl-L-Tryptophan. 10th Mid-Year chemical research society of india symposium in chemistry - National Level, National Institute of Technology, Trichy - July 23-25, 2015.