

**Name : C. DOROTHY SHEELA**

**Designation : Assistant Professor**

**Department : Chemistry**

**Date of Joining : June 1997**

**Phone with Extn. No: 0452-2530070-321**

**Email : cdsheela@yahoo.com**



**Educational Qualification:**

DEGREE	SUBJECT	COLLEGE / UNIVERSITY & PLACE	YEAR COMPLETED
B.Sc	Chemistry	Lady Doak College, Madurai	1984
M.Sc	Chemistry	The American College, Madurai	1986
Ph.D	Chemistry	Madurai Kamaraj University, Madurai	1992

**Specialisation in Teaching:**

- Inorganic Chemistry
- General Chemistry

**Specialisation in Research : Coordination chemistry**

**Research Interests : Organometallics and main group chemistry**

**Other Work Experience:**

Designation	Institution / Company	Year - From (month/year) To (month/year)
Lecturer	Christ Church College Kanpur	Nov – 1992-May 1997

**Membership in Professional Bodies:**

- BOS member Lady Doak College 2013 from 2008-till date
- BOS member SVN College – University Nominee 2010

**Awards / Fellowships:**

CSIR FELLOWSHIP June 1987-1991

## UGC Sponsored Projects:

### Major Project:

Title	Year of Award	Amount Awarded	Status of the project- Completed/ Ongoing	Co-investigator, if any
Development metal complex band NLO material various pokalial application	2007 to2009	14.99.laksh	Completed	

### Minor Project

Title	Year of Award	Amount Awarded	Status of the project- Completed/ Ongoing	Co-investigator, if any
Synthesis and charactiantion of phosphazene based hetero bimetallic complexes	2005-2007	80,000/-	Completed	

### Other activities / academic credentials:

#### List of Papers Published in International Journals

##### 2003

1. Cobalt (II) Nickel(II) and Copper (II) Complexes of 1-Hydroxy-2NaphtyuI (4-xstytgl) ketoneoxime P. Tharmaraj, C.D. Sheela and C. Natarjan *Asian J. Chem* 2003, 15, 324 1709-1714
2. Studies on Schiff base complexes of Slicylaldehyde with sulphamethoxazole and their Antimicrobial activities C.D. Sheela, A.Gomathi, S. Ravichandran and P. Tharmaraj *Polish.J. Chemistry* 2006, 80, 1781-1787

##### 2008

3. Synthesis and Charcterization of (N-N-bis-1-Methyl-3-5-dimethyl pyrazolyl) -4-aminoacetophenone and its Cu(II). Ni II) and Fe II) complexes P. Tharmaraj, D. Kodimunthiri, C.D.Sheela *SVC Research Jouranal* , 2008, 3,46

##### 2009

4. Bis – (3,5-dimehtyl-pyrazolyl-1-methyl)-(3-phosphanyl-propyl)-amine complexes of copper II), nickel( II), and Cobalt II) P. Tharmaraj, D Kodimunthiri and C.D sheela, P. Prakash, *J. Coor Chem.*, 2009, 62, 1347

5. Synthesis, Spectral characterization and Antimicrobial Activity of Copper (II), Cobalt(II) and Nickel(II) Complexes of 3-Formylchromoniminopropylsilatrane, P. Tharmaraj, D Kodimunthiri, C.D. Sheela, C.S Shanmuga priya *J. Coor Chem.*, 2009, 62, 2220
6. Catalytic and biological activity of transition metal complexes of salicylaldiminopropyl phosphine, P. Tharmajr D. Kodimunthiri and C.D. Sheela, P. Praksh, *J. Coor. Chem.*, 2009, 62, 2883-2892.
7. Synthesis, spectral studies adn antibacterial activity of Cu(II), Co(II) and Ni(II) Complex of 1-(2-hydroxyphenyl)-3phenyl-2-propen-1one, N2-[(3,5-dimethyl-1H-pyrazol—1-yl)methyl]hyazone, p. Tharmaraj, D. Kodimunthiri, C.D. Sheela and C. S shanmuga Priya *J. Serb. Chem. Soc.* 74(8-9) 927-938 (2009)

## 2010

8. Synthesis, spectral charcterizaiotn, and antimicrobial studies of metal complexes of the schiff base derived from [4-amino-N-guanylbenzene sulfonamide] and salicylaldehyde, C.D. Sheela, C. Anitha, P. Tharmaraj and D. Kodimunthri, *Journal of Coordination chemistry* Vol. 63, No.5, 10 March 2010, 884-893

## 2011

9. Synthesis, spectral, bioactivity, and NLO properties of chalcone metal complexes; S. Sumathi; P. Tharmaraj; C. D. Sheela; R. Ebenezer; *Journal of Coordination Chemistry* Vol. 64; No. 10; 20 may 2011; 1707 – 1717
10. Synthesis characterization, NLO study, and antimicrobial activities of metal complexes derived form 3-(3-(2-hydroxyphenyl)-3-oxoprop-1-enyl)- 4H-chromen-4-one and sulfanilamide; S.Sumathi; P.Tharmaraj; C.D. Sheela; R. Ebenezer; P. Saravana Bhava; *Journal of coordination chemistry*; Vol. 64No 10; 20 May 2011; 1673-1682.
11. Synthesis, Spectroscopic, Biological screening, Corrosion inhibition and DNA activity of Metal complexes Derived from  $\beta$ -diketone and 4-aminoantipyrine. P. Tharmaraj S. Sumathi, C.D. Sheela, R.Ebenezer; *International Journal of Inorganic chemistry*; Article ID: 154326, 2011; Doi: 10.1155/2011/154326
12. Synthesis, Characterization and biological activity some transition metal complexes derived from novel hudrozone azo Schiff base ligand, P. Tharmaraj, C. Anitha, S. Sumathi, C. D. Sheela; *Int J. Of Inog Chem*; Vol. 2011; Artic ID 493942, 2011; 8 pages
13. Spectral NLO, fluorescence and biological activity of Knoevenagel condensate ligands and its metal(II) Complexes, *Journal of Coordination Chemistry*, P. Tharmaraj, S. Sumathi; C. Anitha; C.D. Sheela; *Int J. Of Inorg Chem*; Vol. 2011; Artic ID 154326, 2011; 8 pages.

## 2012

14. P. Tharmaraj, M. Kalanithi, M. Rajarajan, C.D. Sheela “Spectral, biological screening of metal chelates of chalcone based schiff base of N-(3-aminoprohyl) imidazole, *Spectrochimica Acta Part A*; 87; 2012; 155-162, (2012).

15. P. Tharamaraj, S. Sumathi C.D. Sheela, R. Ebenezer “Synthesis, Spectral, NLO studies and antimicrobial activities of Curcumin diketimines metal complexes, Journal of Coordination Chemistry; Vol. 65; No. 3; Feb 2012; 506-511(2012)
16. M. Shymamala Devi, P. Tharmaraj, C.D Sheela, R. Ebenezer, Synthesis, Structural, thermal and Photo—Physical Properties of Triazine Based NLO materials; Journal of Fluorescence; 1-8 (2012)
17. C. Anitha, C.D. Sheela, P. Tharmaraj, S. Sumathi , Spectroscopic studies and biological evaluation of some transition metal complexes of azo Schiff-base ligand derived from (1-phenyl-2,3-dimethyl-4-aminopyrazol-5-one) and 5-((4-chlorophenyl)diazenyl)-2-hydroxybenzaldehyde, Spectrochimica Acta Part A, 96, 493 (2012)
18. S. Sumathi, P. Tharmaraj, C.D. Sheela, C. Anitha, Synthesis and studies on Cu(II), Co(II), Ni(II), Complexes of Knoevenagel  $\beta$ -diketone Ligands. Spectrochimica Acta Part A, 97, 377 (2012)
19. C. Anitha , C.D. Sheela, P. Tharmaraj, Johnson Raja, Synthesis and Characterization of Vo(II), Co(II), Ni(II), Cu(II), and Zn(II), complexes of chromone based azo-linked Schiff base ligand, spectrochimica Acta Part A, 98, 25 (2012).
20. R. Shanmugakala, P. Tharmaraj, C.D. sheela, C. Anitha, Synthesis and studies on S-Triazine-based ligand and its metal complexes, Int. J. Inorg. Chem., Article ID 301086, 7 pages (2012)

## 2013

21. C. Anitha, C.D. Sheela, P. Tharmaraj, V.V. Hema, Synthesis, Spectroscopic characterization and biological activities of metal complexes of 4-((4-Chlorophenyl)diazenyl)-2-((p-tolylimino)methyl)phenol, J. Chem., Article ID 724163, 8 pages (2013).
22. C. Anitha, C.D. Sheela, P. Tharmaraj, R. Shanmugakala, Studies on synthesis and spectral characterization of some transition metal complexxes of Azo-azomethine derivative of diaminomleonnitrile, Int., J. Inorg. Chem., Article ID 436275, 10 pages (2013)
23. R. Ebenezer, P. Tharmaraj, C.D. Sheela and D. Kodimunthiri, synthesis, spectral characterization and biological activity of vanillin substituted silane schiff base and their metal(II), complexes; International Journal of Inorganic Chemistry; (in press)
24. R. Shanmugakala, P. Tharmaraj, C.D. Sheela N. Chidambaranathan, Transition metal complexes of s-triazine derivative: new class of anticonvulsant antiinflammatory and neuroprotective agents Med. Chem. Res Dol 10.1007/s00044-013-0634-0

## List of conferences / seminars participated and presented papers

1. C.D. Sheela, R. David Jebasingh, P. Tharmaraj Cu(II), Ni(II), Co(II), and Zn(II), complexes of 1-phenyl-4-(2hydroxybenzoyl)pyrazoles, Emerging Trends in Chemistry – 1, 2006, CPA College, Bodi
2. C.D. Sheela, P. Suhasini, P. Tharmaraj Synthesis and characterization of Schiff base condensed cyclophosphazene ligand and their complexes, Emerging trends in Chemistry 1, 2006, CPA college Bodi
3. C.D. Sheela, Umadevi, P. Tharmaraj Synthesis and characterization of some metal chelates of pyrazolone based ligands, Frontier areas in chemistry 2007, thiyagaraja College, Madurai

4. C.D. Sheela, Jone Kirubavathy “Synthesis and characterization of Mn(II), U(IV), De (III), Cd (II) and Cu(II), complexes of 2(o-hydroxyphenyl)-5,6-benzo 1,3-oxazine” National symposium on frontier Areas in Chemistry, 10&11<sup>th</sup> Jan-2008, The American College, Madurai
5. C.D. Sheela “Synthesis and characterization of few transition metal complexes of 3-(1-hydroxy-2-naphthyl)-5-phenyl-2-pyrazoline” National Symposium on Frontiew Areas in Chemistry, 10 & 11<sup>th</sup> Jan-2008, The American College, Madurai
6. P.Tharmaraj, D. Kodimunthiri and C.D. Sheela, Metal complexes of N.N-bis-(methyl 3,5-dimethylpyrazolyl)-aminophosphine for Catalytic Applications, National Symposium on Frontier Areas in Chemistry, 10 & 11<sup>th</sup> Jan-2008, The American College, Madurai
7. P. Tharmaraj, D. Kodimunthiri and C.D. Sheela, Synthesis and studies of Copper(II), Cobalt(II), Zinc(II), and Manganese(II), Complexes of 2-hydroxychalcon imino propylsilatrane, National Seminar on Theoretical and Chemical Science, 22&23<sup>th</sup> Feb – 2008, Annamalai University.
8. P. Tharmaraj, D. Kodimunthiri and C.D. Sheela, Synthesis and characterization of (N-N-bis-1-methyl-3,5-dimethylpyrazolyl)-4-aminoacetophenone and its Cu(II), Co(II), Ni(II), and Fe(II), complexes, Naitonal level conferences on Recent Advace in the study of transition Metal Complexes, 13 & 14<sup>th</sup> August-2008, V. H.N.S.N. College, Virudhunaga.
9. P. Tharmaraj, D. Kodimunthiri and C.D. Sheela, Synthesis and studies on Salicyladiminopropyl Phosphine and Their Cu(II), Co(II), Ni(II), Complexes National Seminar on Recent trends in chemisty (ETC-2), 24 & 25<sup>th</sup> July-2008, C.P.A. College, Bodi
10. P. Tharmaraj, D. Kodimunthiri and C.D. Sheela, Synthesis Characterization and Biological activity of Complexes derived from 1-methyl-(3,5-dimethyl pyrazolyl)-[3-(2-hydroxyphenyl)-5phenyl-pyrazolen, National Conferecne on Emerging trends in chemical research, 17 & 18<sup>th</sup> Oct-2008, Annamalai Universtiy
11. P. Tharmaraj, C. Anitha C. D. Sheela “Syntheisi, spectral characterisation and antimicrobial studies of metal complexes of Schiff base derived from [4-amino-N-guanylbenzene sulfonamide]” and salicylaldehyde National seminare on Emerging Trends in Chemistry [ETC-2] on July 24-25, 2008 at Cardamom planters Association College, Bodinayakanur, Theni District
12. P. Tharmaraj, D. Kodimunthiri and C. D. Sheels, Synthesis and Stuctural elucidation and biological activity of Salen-type transition complexes, National Seminar on recent trends in Chemistry, 26 & 27<sup>th</sup> Feb – 2009, J.A. College for Women, Periyakulam
13. P. Tharmaraj D.Kodimunthiri and C.D. Sheela, Synthesis and Studie on Formylchromoniminopropylphosphine and its Transition Metal Complexes, Internation Conference on Coordination & Organometallic Chemistry, 19 & 20<sup>th</sup> March 2009, Bharathiar Universtiy, Coimbatore
14. P. Tharmaraj, Ebenezer. R. And C.D. Sheela, synthesis, Characterization and Antimicrobial Studies of Schiff Base Having a silance group and their transition metal complexes, Internationa conference on coordination & Organimetallic Chemistry 19 & 20<sup>th</sup> March 2009, Bharathiar Universtiy, Coimbatore.
15. P. Tharamaraj, P. Saravaja Bhava, D. Kodimunthiri and C.D. Sheela, Synthesis spectral characterization and biological activity of 2-(2-amino-4-(furnyl-2-yl)-6H-1,3-oxazin-6-yl)phenol and its metal complexes, National seminar on moderna trends in chemistry sep 24-25 2009, Thiagarajar College, Madurai

16. P. Tharmaraj, C. Anitha and C.D. Sheela, Synthesis and spectral characterization and antimicrobial studies of metal complexes of Schiff base derived from [4-(chloro phenylazo)-2-hydroxy benzaldehyde] and salicyl hydrazide, National Conference on recent trends in chemistry 18<sup>th</sup> & 19<sup>th</sup> Feb-2010, J.A. College for women, Periyakulam
17. P. Tharmaraj, T. Yogeewaran and C.D. Sheela, Synthesis and studies on N,N, bis (1,4)-1,5-diphenylpenta-1-4-dien-3-ylidene)ethane-1,2-diamine and their Transition metal complexes, National Conference on Recent Trends in Chemistry 18<sup>th</sup> & 19<sup>th</sup> Feb-2010, J.A. College for women periyakulam
18. C.D.Sheela, Z. Nilofar Nisa P. Tharmaraj, spectral studies on complexes on pyrazolone based ligands, National conferences on recent trends in chemistry 18<sup>th</sup> & 19<sup>th</sup> Feb-2010, J.A. College for women periyakulam
19. P.Tharmaraj, D.Kodimunthiri and C.D.Sheela, Synthesis and characterization of (N-N-bis-1-methy-3,5-dimethylpyrazolyl)-4-aminoacetophenone and its Cu(II), Co(II), Ni(II), and Fe(II), complexes, National level conferences on recent advances in the study of transition metal complexes, 13 & 14<sup>th</sup> August – 2008, V.H.N.S.N.College, Virudhunagar
20. P. Tharamaraj C. Anitha and C.D. Sheela synthesis Spectroscopic characterization and Biological activity of Metal Complexes derived from schiffbase and 4-Amino-2,3-Dimethyl-1-Phenyl-3-2-Pyrazolin-5-one, National Seminar on Emerging trends in chemistry sep 23-24 2010, CPA College, Bodi.
21. P. Tharamaraj, S. Sumathi C.D.Sheela and Ebenezer . R. Synthesis and studies on novel chalcone based metal complexes, National Seminar on Emerging Trends in Chemistry Sep 23-24 2010 CPA College, Bodi
22. P. Tharamaraj, S.Sumathe C.D. Sheela and R. Ebenezer synthesis spectroscopic characterization, Biological screening corrosion inhibition and DNA Activity of Transition Metal Complexes Derived From diketone and 4-aminoantipyrine Chennai Chemistry Conference – 2011, 11<sup>th</sup> – 13<sup>th</sup> Feb 2011 IIT Madras, Madras.
23. P. Tharamaraj, S.Sumathe C.D. Sheela and Jeevika Spectral NLO fluorescence and biological activity of Knoevenagel condensate of  $\beta$ -diketone ligands and its metal(II), complexes, National seminar on recent advances in applications of spectroscopy 25 & 26<sup>th</sup> August 2011. Fatima College, Madurai
24. P. Tharmaraj, D. Ponpriya C. Suchitra and C. D. Sheela, Transition metal complexes of 4-oxo-4H-1-benzopyran-3-carboxaldehyde-0-hydroxybenzoylhydrazone: their preparation characterization and antimicrobial activity, National seminar on recent advances in applications
25. P.Tharmaraj, C. Anitha C.D. Sheela Synthesis, Spectral characterization antimicrobial NLO, SEM and DNA studies of azo Schiff base and its metal(II), complexes international symposium on modern trends in inorganic chemistry MTIC-XIV on Dec 10-13 2011, University of Hyderabad Hyderabad
26. C.D. Sheela C. Anitha P. Tharamraj, Synthesis and characterization of metal nano particles for various potential applications using sulfur containing ligands, international conference on nano science and technology Jan 20-23, 2012, Hyderabad
27. P. Tharmaraj, C.D. Sheela and R. Shanumgalkal studies of triazine Based pyrazolyl Ligand and its complexes National conference on Emerging Trends in Chemistry, 2012 11<sup>th</sup> Jan 2012 Bishop Heber College, Trichy
28. P.Tharmaraj, C. Anitha C.D. Sheela “Synthesis characterization biological and NLO studies of V(II), Co(II), Ni(II), Cu(II), Zn(II), Complexes of azo Schiff base ligand” National symposium in Chemistry on Feb 3-5, 2012 at CSIR-NIIST, Trivandrum

29. C.D. Sheela D. Jim Livingston, P. Tharmaraj, Synthesis spectral characterization and antimicrobial activities of transition metal complexes with 3-carbaldenhyde-chromone-4-phenyl-thiosemicarbazone, Recent trends in chemistry, Feb 2012, Hajee Karutha Rowther College, Uthamapalayam
30. C.D. Sheela V. Harikrihsna, A. Raja, Synthesis and characterization of ONS donor ligands and a study on CNS activity muscle relaxant and antimicrobial activities, National workshop on Recent trends in Inorganic Materials, Mar 9,10,2012, national Engineering College, Kovilpatti.
31. P. Thamaraja, C. D. Sheela and R. Shamugakal – “Amperometry detection of Glucose level in Blood samples based on CuO nanofibers modified GCE” National Convention of Electchemists, 2012, 14-15<sup>th</sup> Sep 2012, B.S. Abdur Rahaman University Chennai
32. P. Tharmaraj C. D. Sheela and R. Ebenezer Synthesis, Characterization and potential applications of phosphazene based metal complexes national seminar on Emerging trends in Chemistry 2012, 4<sup>th</sup> – 5<sup>th</sup> Oct 2012 CPA College, Bodi
33. P. Tharmaraj, C.D. Sheela and M. Shyamaladeve “synthesis, spectral, thermal fluorescence NLO and biological activity of triazine metal complexes national seminar on emerging trends in chemistry 2012, 4<sup>th</sup> 5<sup>th</sup> Oct 2012, CPA College, Bodi”
34. P. Tharmaraj, C. D. Sheela and R. Shanmugakala in vivo neuroprotectivity anticonvulsant and anti-inflammatory studies on triazine based ligand and its metal complexes in mice national seminar on emerging trends in chemistry 2012 4<sup>th</sup> 5<sup>th</sup> Oct 2012 CPA College, Bodi
35. P. Tharmaraj, C.D. Sheela and M. Shyamaladevi spectral fluorescence NLO and biological activity of Cu(II), Co(II), Ni(II), and Zn(II), complexes of triazine international conference on biological inorganic chemistry 20<sup>th</sup> 22<sup>nd</sup> Feb 2013 periyar university salem
36. P. Tharmaraj, C.D. Sheela and R. Ebenezer Synthesis characterization and studies of hydroxyl and amino substituted cyclotriphosphazene and its metal(II), Complexes, International conference on biological inorganic chemistry 20<sup>th</sup> – 22<sup>nd</sup> Feb 2013, Periyar University salem
37. P. Tharmaraj, M. Vathanaruba C. D. Sheela Studies on new Cu(II), complexes of 1,3,5-triazine based ligands RTAC-2013 ANJAC Sivakasi
38. C. D. Sheela D. Jim Livingston P. Tharmaraj, Synthesis spectral NLO and biological activity of Knoevenagel condensate of a chromone based diketone ligand and their metal (II), complexes, International conference on Biological Inorganic Chemistry, Feb 20-22, 2013 Periyar University Salem.