Dr. S. CHANDRA LEKA
Assistant Professor

Contact Address:

Department of Chemistry
Urumu Dhanalakshmi College
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Academic Qualifications:

Degree	**Discipline**	**University**	**Class**	**% of marks/CGPA**	**Year of passing**
M.Sc. Degree	Chemistry	Dhanalakshmi Srinivasan College of Arts and Science for women, Peramabalur, (Bharathidasan University, Tiruchirappalli)	I	**76.72%**	April, 2005
M.Phil. Degree	Chemistry	Bharathidasan University, Tiruchirappalli	I	**70.2%**	March, 2008
Ph.D. Degree	Chemistry	P.G and research Dept. of Chemistry, AVVM Sri Pushpam College, Poondi, Thanjavur (Bharathidasan University, Tiruchirappalli)	-	Completed	February, 2013

Teaching Experience: 6 Years

2014 onwards working as Assistant Professor, Department of Chemistry, Urumu Dhanalakshmi College, Kattur, Tiruchirappalli-620 019

Area of Research/Specialization:

Inorganic chemistry, Coordination Chemistry, Pharmaceutical Chemistry, Electrochemistry

Research Supervision / Guidance

Program of Study	Completed	Ongoing
Ph.D.	**-**	**01**
M.Phil.	**11**	**03**
M.Sc.	**06**	**02**

Publication of Research papers:

h-index : 7
i 10 index : 6
Total Citations : 152

S. No	Nature		Published
1.	Refereed Journals	National	02
		International	20
2.	Conferences/ Seminar Presentations	National	11
		International	05

Additional Responsibilities

1. Member in Welfare planning and Development committee
2. Member in Electoral literacy Club
3. Convener in Quiz competition at the Interdepartmental level at Urumu Dhanalakshmi College

Faculty Improvement:

S. No.	Name of the Seminar / Conference / Symposia Workshop etc.	Name of the sponsoring agency	Place and Date
1	Lecture workshop on recent Trends in Chemistry	-	Dept. of Chemistry, AVVM Sri Pushpam College, Poondi, September 26-27, 2014.
2	Orientation programme	UGC Academic Staff College	UGC Academic Staff College, Bharathidasan University, Khajamalai campus, Tiruchirappalli-23 20.05.2014- 16.06.2014
3	Summer school (Refresher course) in Material Science	UGC-HRDC	UGC-HRDC, Bharathidasan University, Tiruchirappalli 02.03.2018-22.03.2018

Event organized

Organizing Secretary – Seminar on Recent Advances in Chemical Science, Department of Chemistry Urumu Dhanalakshmi College, Tiruchirappalli on 02.03.2020

Invited Lecture

Delivered invited lecture on synthesis, characterization and biological activity of Cu(II) complex in National seminar on recent trends in Chemistry held at the Department of Chemistry, Idhaya College for Women, Sarugani, Tamil Nadu 63041 dated on 26.07.2018.

Research Publication in National/International Journals

1. Devadoss, A., Dharmalingam, P and **S. Chandraleka.** 2020. Characterization of *Tinospora Cordifolia* Silver nanoparticle and its amelioration effect on waste water treatment. Studies in Indian Place Names, 40 (48), 436-446.

2. Devadoss, A., Dharmalingam, P and **S. Chandraleka**. 2020. Compound identification and molecular docking study on *Cuscuta reflexa*, *Foeniculum vulgare* and *Tinospora cordifolia*. Studies in Indian Place Names, 40 (48), 519-535.

3. Dhanasekaran, D., **Chandraleka, S**., Sivaranjani, G. and S. Latha.2019. Microbial organic compounds generating taste and odor in water. K M Gothandam et al. (eds.), Nanoscience and Biotechnology for Environmental Applications, Environmental Chemistry for a Sustainable , World. pp. 225-247. Springer, https://doi.org/10.1007/978-3-319-97922-9_8

4. **Chandraleka, S** and G. Chandramohan. 2017. Spectroscopic techniques in analysis of environmental pollutant. Book series on Environmental Science and Engineering, Instrumentation, Modelling and Analysis, Bhola R Gurjar and J N Govil (edit), Studium Press LLC, Houston, Texas, USA, ISBN (10): 1-62699-088-3, Vol.7, pp.196-215.

5. Priyadharsini P, Dhanasekaran D, Gopinath P M, Ramanathan K, Shanthi V, **Chandraleka S** and Bhaskar Biswas. 2017. Spectroscopic identification and molecular modeling of Diethyl 7- hydroxytrideca - 2, 5, 8, 11- tetraenedioate - a herbicidal compound from *Streptomyces* sp. Arab J Sci Eng. DOI: 10.1007/s13369-016-2401-2

6. Dey, D A. Basuroy, A. Ranjani, L.Gayathri, **S. Chandraleka**, D. Dhanasekaran, M.A. Akbarsha, Chung-yu shen H.L. Tsai, M. Maji, N. Kole, and B. Bhaskar. 2015. Synthesis and bio-catalytic activity of isostructural cobalt(III)-phenanthroline complexes. *J. Chem. Sci.* 127, (4) 649–661.

7. Dey, D., A. De, S. Pal, Partha Mitra, A. Ranjani, L. Gayathri, **S.Chandraleka**, , D.Dhanasekaran, M. A. Akbarsha, N. Kole, B. Biswas. 2015. Synthesis, crystal structure, catecholase activity, DNA cleavage and anticancer activity of a dinuclear manganese(III)-bipyridine complex. Indian Journal of Chemistry, 54A: 170-178

8. D. Dey, S. Pal, **S. Chandraleka**, D. Dhanasekaran, Niranjan Kol and Bhaskar Bi swas.2014.Synthesis and spectroscopic characterization of a dinuclear nickel complex : A bio-relevant catalyst and its reactivity J. Indian Chem. Soc., 91:1267-1276.

9. Dey,D, Pal, S, Pratim Bag, P, Saha, S, **Chandraleka, S**, Dhanasekaran, D, Kol, N and B. Biswas. Copper(II) complexes with a (N,O)-donor Schiff base ligand : Syntheses, crystal structure, DNA interaction study and molecular docking, J. Indian Chem. Soc., 2015,92, 191-202

10. **Chandraleka, S**. Ramy, K. Chandramohan, G., D.Dhanasekaran and A. Panneerselvam. 2014. Antimicrobial mechanism of copper(II) phenanthroline and bipyridyl complex on bacterial and fungal pathogens. Journal of Saudi Chemical Society. 18(6): 953-962

11. **Chandraleka, S** and G. Chandramohan. Synthesis, characterization and thermal analysis of the copper(II) complexes with 2,2'-bipyridyl and 1,10-phenanthroline, 2014, African Journal of Pure and Applied Chemistry, 8(10), 162-175.

12. **Chandraleka, S** and G. Chandramohan. Larvicidal activity of copper(II) complexes with 1,10phenathroline and 2,2'-bipyridyl against Culex and Anopheles mosquito larvae.2014, International Journal of ChemTech Research, 6(14): 5450-5457

13. Subhasish Saha, A. Priyadharshini, D. Dhanasekaran, N.Thajuddin, **S. Chandraleka**, G. Chandramohan and A. Panneerselvam. Preclinical evaluation and molecular docking of 4-Phenyl-1-napthyl phenyl acetamide (4P1NPA) from Streptomyces sp. DPTB16 as a potent antifungal compound. Computers in Biology and medicine, 42 (2012) 542–547.

14. Dhanasekaran, D., Panneerselvam A., Thajuddin N and **S. Chandraleka**. 2013. Isolation, characterization of antibacterial methyl substituted β-lactum compound from Streptomyces noursei DPTD21 in saltpan soil, India. Journal of Biologically Active Products from Nature, 4(2) 71-88.

15. **Chandraleka, S**, Chandramohan. G, Dhanasekaran, D., P. Meenakumari and A. Panneerselvam. Antifungal activity of amino acid schiff base Copper(II) complexes with phenanthroline and bipyridyl. International J of chemical and analytical sciences. 2011, 2(10), 1235-1240

16. **Chandraleka, S**, Chandramohan. G, Dhanasekaran, D., P. Meenakumari and A. Panneerselvam. Synthesis and Larvicidal, Haemolytic activity of copper(II) complexes of amino acid derived schiff bases. IJPI's Journal of Medicinal Chemistry, 2011, 2(7)1-10. 3.

17. Kiruthikajothi, K., Chandramohan, G. and **Chandraleka, S**. 2013. Synthesis and larvicidal activity of copper complexes containing amino acid and pyridine/triphenylphosphine. International Journal of Current Researc, 5(11), 3419-3421.

18. **Chandraleka, S**, Chandramohan. G, Subhasish Saha, Paneerselvam, A and D. Dhanasekaran. Synthesis, Characterization and Biological activity of Zn(II) Schiff base complex against Drug resistant pathogens. Drug invention today, 2010, 2(1):8-12.

19. **Chandraleka, S,** Shahoor Basha, Chandramohan. G, Paneerselvam, A and D. Dhanasekaran. Synthesis and antimicrobial activity of Cu(III) Schiff base complex. The Internet Journal of Microbiology, 2009, 6(2), 1-8.

20. Subhasish Saha, **Chandraleka, S**, Paneerselvam, A and D. Dhanasekaran. Synthesis, Characterization and Biological activity of Cobalt metal complex against multidrug resistant bacterial and fungal pathogens. Facta Universitasis seies: Physics, Chemistry and Technology, 2009,7(1):73-80.

21. Deepa.D., Chandramohan. G, **Chandraleka, S**, and R.Ranganathan. Oxidative decarboxylation of Indole-3-acetic acid by potassium bormate: A kinetic and mechanistic study and evaluation of biological activity of the product. International J. of Chemical and analytical Science, 2012,3(5):1405-1408.

22. Deepa.D., Chandramohan. G, **Chandraleka**, **S,** and T. Sumathi. Antifungal and antibacterial activity of the oxidized product of Indole- 3-acetic acid in acetic acid in acetic acid medium scavenged and unscavenged by mercuric acetate. International J. of. Bioassay, 2012, 2: 408-411.

Book published

SL. No	Title	Publisher	ISBN No.
1	**Chandraleka, S.** and Bhaskar B **Ligand**	2018, Intech open access publisher, Croatia, Eastern Europe	ISBN 978-1-78923-182-3, eISBN 978-1-78923-183-0, Published 2018-05-23.
2	**Chandraleka S.** **Chemical Reactions in Inorganic Chemistry**	2018, Intech open access publisher, Croatia, Eastern Europe	ISBN 978-1-78923-146-5, eISBN 978-1-78923-147-2, May 23, 2018
3	**Chandraleka, S** and G. Chandramohan . **Transition metal Complexes: Biological activity**	2014, Lambert Academic Publishing, Saarbrucken, Germany	ISBN. No: 978-3-659-56620-2

National, International Conferences/ Seminar Presentations

1. **Chandraleka, S**, Chandramohan. G, Subhasish Saha, and D. Dhanasekaran. 2010. Synthesis and evaluation of antimicrobial property of Zn(II) coordination complex against Drug resistant pathogens, Phytocongess, An International Conference on Herbs and Herbomineral

Formulations, organized by Centre for advanced Research in Indian System of Medicine, SASTRA University, Thanjavur on 6 & 7th February, 2010.

2. **Chandraleka, S**, Chandramohan. G, Subhasish Saha, and D. Dhanasekaran. 2010. Synthesis and antimicrobial activity of Nickel coordination complex against bacterial and fungal pathogens. International conference on Biotechnology, Food and Bioengineering- Emerging Trends and Future Prospects, organized by PRIST University and Indian Institute of Crop Processing Technology, Thanjavur on 25 & 26th, February , 2010.

3. **Chandraleka, S**, Chandramohan. G, P. Meenakumari and D. Dhanasekaran. 2010. Preparation, Spectroscopic characterization and pharmacological activity of Cu (II) coordination complex of 1, 10-Phenanthroline. International conference on Recent Frontiers in Applied Spectroscopy, organized by Department of Chemistry, Annamalai University, Annamalainagar on 22 & 24th, September, 2010.

4. **Chandraleka, S**, Chandramohan. G. 2011. Synthesis, characterization and bioactivity of Schiff base Copper (II) complexes derived from L-Tryptophan and 1,10-Phenonthroline, National conferences on Recent trends in Organic synthesis held at Dept of Chemistry , Bharathidasan Univertsity, Tiruchirappalli-24 on 24-25th February, 2011.

5. **Chandraleka, S**, Chandramohan. G, Paneerselvam, A and D. Dhanasekaran. 2011. Synthesis, characterization, antibiogram studies of novel Cu(II) complex of Schiff base ligand with 2,2' bipyridyl, International Conference on Advances in Engineering & Technology – 2011 held at EGS Pillay Engineering College, Nagapattinam - 611 002 on 27-28th May, 2011.

6. **Chandraleka, S** and G. Chandramohan. Synthesis, Spectral and Thermal characterization Copper(II) complexes derived from Leucine involving 1,10 Phenonthroline or 2,2' bipyridyl as neutral ligand, National conference on emerging trend in Chemistry, held at Dept. of Chemistry, Bishop Heber College, Tiruchirappali on 11th Jan, 2012.

7. **Chandraleka, S**., D. Deepa and G. Chandramohan.2012. Synthesis, Spectral and Thermal characterization of Copper(II) containing 1,10 Phenonthroline or 2,2' bipyridyl. National Seminar on Recent Trends in Polymer and Green Chemistry (NSPGC-2012), Dept. of Chemistry, Rajah Serfoji Govt.College, 2 and 3rd, Feb.2012.

8. Thangaraj, R., **S. Chandraleka**, G. Chandramohan, D. Dhanasekaran. Larvicidal activity of copper(II) complex against Anopheles and Culex mosquito. National Symposium on Prospects and Retrospects in Microbial technology, jointly organized by Dept. of Microbiology, Biotechnology, Cauvery College for Women and Dept. of Microbiology, Bharathidasan University, Tiruchirappalli on Feb 17 and 18th, 2012.

9. Chandraleka, S., D.Deepa and G. Chandramohan. 2012. Synthesis, Spectral and Thermal characterization Copper(II) complexes derived from Tryptophan involving 1,10 Phenanthroline or 2,2' bipyridyl as neutral ligand, National seminar on challenging perspectives in Physics and Chemistry, held at Dept. of Physics and Chemistry, Bon Secours College for Women Feb 29th, 2012.

10. B. Biswas, D. Dey, S. Pal, S. Chandraleka, D. Dhanasekaran and N. Kole. Synthesis and spectroscopic characterization of an octahedral cobalt (II) complex containing a neutral N6 schiff base: DNA binding, DNA cleavage and antimicrobial activity. National Conference on New Opportunities and Challenges in Microbial Research, held at Dept. of Microbiology, Bharathidasan University on September 5-6th, 2013

11. Kiruthikajothi, K., Chandramohan, G. and **Chandraleka, S**. 2013. Synthesis, pesticidal activity of Schiff base copper(II) complex derived from methionine and pyridine. State level seminar on Recent trends in Chemistry (RTC-13), Kamadhenu College of Arts and Science, 21st September, 2013. Dharmapuri.

12. Kiruthikajothi, K., G. Chandramohan, **S. Chandraleka** and D. Deepa.2013. Synthesis and Characterization of Schiff base Copper(II)complexes derived from Glutamine and pyridine-NCMPCE-13 One day National conference on Science and Humanities, Kongunadu College of Engineering and Technology, 16th, March, 2013. Thotiyam.

13. Kiruthikajothi, K., G. Chandramohan, and **S. Chandraleka**.2014. Synthesis and antimicrobial activity of copper (II) complex with aspartic acid and pyridine-K. International Conference on chemistry in synergy with materials and biology (ICMB-2014), 10,11th January, 2014, Bishop Heber College,Tiruchirappalli.

14.Kiruthikajothi, K., G. Chandramohan, **S. Chandraleka** and P. Saravanan.2014. Synthesis and characterization of Copper(II) reduced Schiff base complex with Triphenylphospine. National Conference on Evolutionary trends in Biological and Pharmaceutical Chemistry(NCETP-2014), 30,31th Jan, Holy Cross College, Tiruchirappalli.

15. Chandraleka, S and G. Chandramohan. 2014. Structural and Thermal studies of coordination compounds of mononuclear Cu(II) with Schiff bases, National Seminar on New opportunities and challenges in Chemical Research, P.G and Research Department of Chemistry at A.V.V.M. Sri Pushpam College, Poondi, Thanjavur Dt on December 29th and 30th , 2014.

16. **Chandraleka, S** and G. Chandramohan. 2015. Spectroscopic and Thermal characterization of mononuclear Cu(II) with amino acid involving 1, 10-phenanthroline, 2, 2'- bipyridyl.
National Seminar on "Recent Advances in Nanomaterials, Dept. of Chemistry and Physics, Jairams Arsts and sciences college, Karur, September 15, 2015.

Research Contributions
Students awarded M.Phil

S.No	Name	Reg. No	Topic
1	.P .Vijay	2K15FT 43178	Synthesis, characterization and antimicrobial activities of Manganese (II) Complex With 1, 10-Phenanthroline
2	P.Nesamani	2K15FT43177	Synthesis, Spectral characterization and Biological activity of Cu(II) Schiff base complex

3	N. Maran	2K15PT-44631	Physiochemical properties of agriculture field soil samples from Ariyalur district
4	A. Madona	2K15PT-44630	Photo catalytic degradation of methylene blue by Tio_2
5	Ms. V. Reka	2K16FT-16477	Synthesis of Silver Nanoparticles using *Vitex negundu* leaf extract and its antibacterial activity
6	J.Renuga	2K16FT-16478	Adsorption kinetics of Acid blue 92 dye decolourization using groundnut shell as activated carbon
7.	V.Anbalagan	2K16PT-17758	Physiochemical properties of drinking water samples from Pudukkottai District
8.	J. Geetha	2K17PT-19693	Physiochemical analysis of Borewell water in Tirunelveli District

Workshop/ Conferences Attended:

Lecture workshop on recent Trends in Chemistry, held at Dept. of Chemistry, AVVM Sri Pushpam College, Poondi, September 26-27, 2014.

National level student symposium on Recent Developments in Bioinorganics, organized by Department of Chemistry, National institute of Technology, Tiruchirappalli, 1st and 2nd October 2004.

Seminar on emerging trends in Chemistry organized by Department of Chemistry, National College, Tiruchirappalli on 24th January, 2004.

State level seminar CHEMSEM- 2002, held at Department of Chemistry, Theivanai Ammal College for Women on 8th, November, 2002.

CHEM-LUMINOUS 2005, An Inter Collegiate Extravaganza, organized by Department of Chemistry, Holy Cross College (Autonomous), Tiruchirappalli on 1st January 2005

Dr. Sivaramakrishnan Nagarajan Memorial Inter- Collegiate Quiz contest in Chemistry held at Bishop Heber College on 1st March, 2005.

Awards, Prizes, Honours:

Poster award and Quiz Contest -CHEM-LUMINOUS 2005, An Inter Collegiate Extravaganza, organized by Department of Chemistry, Holy Cross College (Autonomous), Tiruchirappalli on 1st January 2005

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