

**Name:** Dr. A.SELVAN

**Designation:** Assistant Professor

**Department:** Chemistry

**Date of Joining:** 14/11/2013

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**Educational Qualification:**

Degree	Subject	College / Uuniversity & Place	Year Completed
B.Sc.,	Chemistry	S.B.K.College, Aruppukottai	2003
M.Sc.,	Chemistry	NMSSVN College, Madurai	2007
M.Phil.,	Chemistry	VHNSN College, Virudhunagar	2008
Ph.D.,	Inorganic Chemistry	VHNSN College, Virudhunagar	2011
B.Ed.	Physical Education (Chemistry)	S.B.T.College of Spl. Education, Madurai	2004

**Specialisation in Teaching:** Inorganic Chemistry

**Specialisation in Research:** Coordination Chemistry

**Research Interests:** Synthesize of bio-molecules

**Other Work Experience:**

<b>Designation</b>	<b>Institution / Company</b>	<b>Year - From (month/year) To (month/year)</b>
Teaching Assistant	V.V.Matriculation Higher Secondary School, Kodai hills	2004-2005
Assistant Professor	Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering College, Chennai	09/02/2011 to 30/10/2013

**Administrative /Academic Position/s (held / currently holding):**

<b>Positions held / currently holding</b>	<b>Year - From (month/year) To month/year)</b>

**Membership in Professional Bodies:**

The Indian Science Congress Association  
Indian Council of Chemists  
Association of Chemistry Teachers  
Society for Materials Chemistry  
Indian Crystallographic Association

**Editorial Board Member**

Asian Journal of Pharmaceutical Analysis and Medicinal Chemistry (AJPAMC)  
International Journal of Engineering and Advanced Technology (IJEAT)  
International Journal of Advance Research (IJOAR)

**Publications: International-9, National -2****Books: Nil**

### Articles Published in International Journals:

1. DNA interaction and antimicrobial studies of novel copper(II) complex having ternary Schiff base  
*J. Iranian Chem. Res.*, **1** (2008) 129
2. Spectral, magnetic, biocidal screening, DNA binding and photocleavage studies of mononuclear Cu(II) and Zn(II) metal complexes of tricoordinate heterocyclic Schiff base ligands of pyrazolone and semicarbazide/thiosemicarbazide based derivatives  
*Spectrochim. Acta Part A* **76** (2010) 161.
3. DNA interaction, enhanced DNA photocleavage, electrochemistry, thermal investigation and biopotential properties of new mixed-ligand complexes of Cu(II)/VO(IV) based on Schiff bases  
*J. Mol. Struct.*, **985** (2011) 173–183
4. Studies on DNA binding, electrochemical activation, DNA photocleavage and biopotency of N and O donor bidentate-ligands with their coordination properties towards Cu(II), Co(II) and Zn(II) ions  
*J. Coord. Chem.*, **64** (2011) 534–553
5. Synthesis, spectroscopic, electrochemical, DNA Binding and photocleavage studies on coordination compounds of bis(4-aminophenyl)methane based novel Schiff bases  
*Russian J. Inorg. Chem.*, **56** (2011) 759–770
6. Investigation of DNA binding mechanism, photoinduced cleavage activity, electrochemical properties and biological functions of mixed ligand copper(II) complexes with benzimidazole derivatives: Synthesis, structural characterization and spectral study  
*J. Enzy.Inhib.Med. Chem.*, **June 2012, Vol. 27, No. 3 : Pages 380-389**
7. Metallation of ethylenediamine based Schiff base with biologically active Cu(II), Ni(II) and Zn(II) ions: Synthesis, spectroscopic characterization, electrochemical behaviour, DNA binding, photonuclease activity and *in vitro* antimicrobial efficacy  
*Spectrochim. Acta Part A* **79** (2011) 873– 883
8. Spectroscopic evidence of Cu(II) and Zn(II) complexes having amino acid based Schiff base: A special emphasis on *in vitro* antimicrobial, DNA binding and cleavage studies  
*J. Iran. Chem. Res.* **4** (2011) 263-279

9. Cu (II) and Zn(II) complexes with unsymmetrical tetradentate Schiff base ligands: Synthesis, spectral characterization, antimicrobial assay and DNA binding property  
*J. Iran. Chem. Res.* **5 (4) (2012) 197-212**
10. Synthesis and characterization of Cu(II), Co(II) complexes derived from indole based N,S donor Schiff base ligand  
**International Journal of Research and Analytical Reviews (IJRAR) 6(2) (2019) 323-331.**
11. Synthesis, characterization and antimicrobial studies of Cu(II), Zn(II) complexes derived from indole based Schiff base ligand  
**Journal of Xidian University 14(4) (2020) 3242-3258**
12. Evaluation of bioactive potential of 1-benzyl indole-3- Carboxyaldehyde thiosemi carbazone schiff base Ligand using pathogens  
*Asian Jr. of Microbiol. Biotech. Env. Sc. Vol. 22, No. (1) : 2020 : 194-199*
13. Synthesis and the Study of Bioefficacy of Schiff base Ligand Decorated by Pyrazolone Moiety  
**Oriental Journal of Chemistry 2020, Vol. 36, No.(2) Pg. 244-253**

#### Articles published in National Journals:

1. New insights into the antibacterial and antifungal activity study of mixed-ligand metal complexes containing tridentate Schiff base  
COLLEGE SADHANA – **Journal for Bloomers of Research**, Vol. 3, No. 1, AUGUST 2010
2. Synthesis, Characterisation, DNA interaction and antimicrobial studies of novel cobalt(II) complex having ternary Schiff base  
COLLEGE SADHANA – **Journal for Bloomers of Research**, Vol. 2, No. 1, AUGUST 2009

#### Conference / Seminar Presentations:

1. Presented a paper entitled “**DNA cleavage and antimicrobial studies of metal complexes having ternary Schiff base**” in the UGC sponsored National Level Conference on “*Recent Advances in the Study of Transition Metal Complexes*” Organized by Research Department of Chemistry, VHNSN College, Virudhunagar, held on August 13<sup>th</sup> & 14<sup>th</sup>, 2008.

2. Presented a paper entitled **“Synthesis, structural elucidation and biological activities of transition metal complexes derived from a tridentate Schiff base”** in the UGC, CRSI & TNSCST sponsored National Level Seminar on **“Challenges in Front of Chemists in the Global Scenario”** Organized by Department of Chemistry, Devanga Arts College, Aruppukottai, held on September 15<sup>th</sup> & 16<sup>th</sup>, 2008.
3. Presented a paper entitled **“Synthesis, characterization and antimicrobial activities of novel transition metal complexes having N<sub>4</sub> type macrocyclic Schiff base”** in the UGC sponsored State Level Seminar on **“Emerging Trends in Chemistry”** Organized by Department of Chemistry, NMSSVN College, Nagamalai, Madurai, held on September 18<sup>th</sup> & 19<sup>th</sup> 2008.
4. Presented a paper entitled **“Synthesis and spectral studies of some transition metal complexes of ternary NO<sub>2</sub> type Schiff base: DNA cleavage and antimicrobial studies”** in the CSIR sponsored National Seminar on **“Recent Trends in Chemistry (RTC-3)”** Organized by Department of Chemistry, Jeyaraj Annapackiam College for Women (autonomous) Periyakulam, held on February 26<sup>th</sup> & 27<sup>th</sup> 2009.
5. Presented a paper entitled **“Synthesis, spectroscopic characterization and biological screening studies of few novel Schiff base complexes”** in the CSIR, DRDO & TNSCST sponsored National Seminar on **“Modern Trends in Chemistry”** Organized by Post Graduate and Research Department of Chemistry, Thiagarajar College, Madurai, held on September 24<sup>th</sup> & 25<sup>th</sup> 2009.
6. Presented a paper entitled **“Synthesis and spectroscopy of Cu<sup>II</sup> and Zn<sup>II</sup> complexes from tricoordinate heterocyclic Schiff base ligands: A special emphasis on antimicrobial and cleavage studies”** in the UGC, CSIR & DST sponsored National Level Seminar on **“Emerging Trends in Chemistry”** Organized by Post Graduate Department of Chemistry, Cardamom Planters Association College, Pankajam Nagar, Bodinayakanur, held on September 23<sup>rd</sup> & 24<sup>th</sup> 2010.
7. Presented a paper entitled **“Synthesis, spectral characterization, DNA binding and biological evaluation of metal(II) complexes bearing di-substituted derivative based Schiff base ligands”** in the UGC sponsored National Seminar on **“Novel Synthetic and Computational Strategies in Chemical Sciences”** Organized by Department of Chemistry, Annamalai University, Annamalai Nagar, Chidambaram, held on March 28<sup>th</sup> & 29<sup>th</sup> 2011.

8. Presented a paper entitled “**Cu(II), Ni(II) and Zn(II) Metal Complexes with Schiff Base : Synthesis, Spectroscopic Characterization, DNA Binding and Antimicrobial Efficacy**” in the **UGC sponsored National Seminar on “Emerging Trends in Chemistry(ERTC-2011)”** Organized by Department of Chemistry, VHNSN College, Virudhunagar, held on July 28<sup>th</sup> & 29<sup>th</sup> 2011.

#### **List of Workshop/Conferences/Seminars Participated**

1. Participated in the **One Day Intercollegiate Seminar (COSIP)**, Organized by Department of Chemistry, S.B.K.College, Aruppukottai, held on 3<sup>rd</sup> Sep 2002.
2. Participated in the One Day intercollegiate symposium on **Modern Trends in Chemistry, MTC-6**, Organized by PG Department of Chemistry & Research Centre, Vivekananda College, Tiruvedakam West, Madurai, held on 4<sup>th</sup> Jan 2006.
3. Participated in the intercollegiate One Day Seminar on **Recent Trends in Chemistry**, Organized by Department of Chemistry, Fatima College (Autonomous), Madurai, held on 28<sup>th</sup> Sep 2007.
4. Participated in the **One Day Workshop on Effective Thesis Writing**, Organized by the research centre in English, VHNSN College, virudhunagar, held on 5<sup>th</sup> Oct 2007.
5. Participated in the **National Seminar on Modern Trends in Pharmaceutical Chemistry**, organized by Department of Pharmaceutical Chemistry, Manonmaniam Sundaranar University, Tirunelveli, held on 30<sup>th</sup> Jan 2008.
6. Participated in the **Prof.Evelyn Rhine Lecture Series-2008**, Organized by Department of Chemistry, Lady Doak College, Madurai, held on 19<sup>th</sup> Feb 2008.
7. Participated in the **National Workshop on Green Chemistry**, Organized by Department of Industrial Chemistry, Alagappa University, Karaikudi, held on 31<sup>st</sup> March 2008.
8. Participated in the **Two Days Workshop on Nanoscience & Technology in Diagnostic Applications & Drug Delivery**, sponsored by Department of Science & Technology, New Delhi & Tamilnadu State Council for Science & Technology, Chennai, Organized by Research Department of Botany, VHNSN College, Virudhunagar, held on 11<sup>th</sup> & 12<sup>th</sup> Aug 2008.
9. Participated in the **One Day Intercollegiate Seminar on Recent Advances in Chemistry, RESAC-10**, organized by the DST-FIST Sponsored Department of Chemistry, VHNSN College, Virudhunagar, held on 10<sup>th</sup> March 2010.

10. Participated in the **Two Days international Workshop on advanced materials IWAM-2011**, organized by Department of Mechanical Engineering, Vel Tech Dr.RR & Dr.SR Technical University, held on 9<sup>th</sup> & 10<sup>th</sup> March 2011.
11. Participated in the **One Day Workshop on functionalised materials organized by** Department of physics, Vel Tech Dr.RR & Dr.SR Technical University, held on 15<sup>th</sup> March 2013.
12. Participated in the **One Day Workshop on Energy and Environment: present scenario and the need for future** organized by Department of Chemistry, Vel Tech Dr.RR & Dr.SR Technical University, held on 18<sup>th</sup> March 2013.
13. Participated in the **Two Days National Symposium on Frontier Areas in Chemistry-II (NAFAC-II)** organized by Department of Chemistry, the American College, Madurai held on 27<sup>th</sup> & 28<sup>th</sup> January 2014.
14. Participated in the **Two Days Workshop on “Recent Advances in Material Chemistry”** organized by Department of Chemistry, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli held on 7 & 8<sup>th</sup> March 2014.
15. Participated in one day workshop on **“Applications of Computational Chemistry”** organized by the royal society of chemistry- south india and school of chemistry, Madurai kamaraj university, Madurai, held on 12 october, 2015.
16. Participated in National level Workshop on **“Functional Materials”** conducted by Department of Physics and Chemistry at Veltech High-tech Dr.Rangarajan Dr.Sakunthala Engineering College, Avadi, Chennai-62, held on 24<sup>th</sup> April 2015
17. Participated in **International Conference on Frontier Areas in Chemistry (ICFAC 2018)** organised by Post Graduate & Research Department of Chemistry, The American College, Madurai held on 17-19 July 2018.
18. Participated in **International Conference on Frontier Areas in Chemistry-2019** organised by the Department of Chemistry, The American College, Madurai held on 5<sup>th</sup> July 2019.
19. Participated in UBCHEA sponsored four-day faculty development program (FDP2020) on **Emerging Leaders of Service Learning Programme** organised by The American College, Madurai held on 13-16 th February 2020 at holiday home, kodaikanal.
20. Participated in One Day **National Symposium on Recent Trends in Chemistry-2020** organized by the alumini (13PGC &14PGC), PG & Research Department of Chemistry, The American College, Madurai held on 12<sup>th</sup> march 2020.

21. Participated as organizer in the **INSPIRE Internship Science Camp** sponsored by Department of Science and Technology, New Delhi conducted during 15-19 January 2020 at The American College, Madurai-625 002.

**Lectures / Talks given: Nil**

**Awards / Fellowships: Nil**

**Doctoral Students**

**Completed: nil**

<b>Name of the student</b>	<b>Title of the thesis</b>

**Ongoing: THREE**

<b>Name of the student</b>	<b>Title of the thesis</b>
<b>R. Anuradha</b>	<b>Transition metal complexes of novel Schiff base ligand as biologically potent metallo-drugs: Synthesis, structural characterization, DNA cleavage and antimicrobial activities</b>
<b>G. Pirakathiswaran</b>	<b>Metal based pharmacologically active Schiff base ligands: Synthesis, structural characterization and antimicrobial activity</b>
<b>M.Sasikala</b>	<b>Metal based biologically active compounds: Design, synthesis, characterization and biological studies of mixed ligand transition metal complexes incorporating Schiff base ligands</b>

**UGC Sponsored Major Projects: nil**

<b>Title</b>	<b>Year of Award</b>	<b>Amount Awarded</b>	<b>Status of the project-</b>	<b>Co-investigator, if any</b>



			Completed /Ongoing	

**UGC Sponsored Minor Project: nil**

Title	Year of Award	Amount Awarded	Status of the project- Completed /Ongoing	Co-investigator, if any

**Overseas Academic Visits:**

**Other Activities / Academic Credentials:**

**Authorization for Guideship received**

Bharathiyar University (state university), Re-accredited by NAAC with “A” Grade, Coimbatore, Tamil Nadu 641046.

Anna University, Centre for Research, Chennai-600 025

Vel Tech Dr.RR & Dr.SR Technical University, Avadi, Chennai-600 062.