# **Curriculum Vitae**

### Dr. Rajendiran Venugopal

Associate Professor School of Basic and Applied Sciences Department of Chemistry Central University of Tamil Nadu Nagakudi, Thiruvarur 610 101 Tamil Nadu, India

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### > Personal Details

<b>Permanent Address</b>	: S/o R. Venugopal, 7/26,
	Nachuvayanoor, Panankattur (PO)
	Omalur (TK), Salem (Dt)
	Pin : 636 455
	Tamil Nadu, India
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Date of Birth	: June 07, 1979		
Marital Status	: Married		

# > Educational Qualifications

BSc (Chemistry)	: Vivekananda College, Madurai (1996 – 99)	
MSc (Chemistry)	: Ayya Nadar Janaki Ammal College, Sivakasi (1999 – 01)	
PhD (Chemistry)	: Bharathidasan University, Tiruchirappalli (2002 - 2008)	
Title of the Thesis	: 'Studies on DNA Binding and Anticancer Activities of Mixed Ligand Copper(II) and Ruthenium(II) Complexes of Diimines'	
Supervisor	: Prof. M. Palaniandavar, FRSC, FASc, FNA., Professor of Eminence & SERB Fellow School of Chemistry, Bharathidasan University Tiruchirappalli - 620 024, India	
Postdoctoral Experience	: Postdoctoral Research Fellow, Institute of Chemistry, Academia Sinica, Taipei, Taiwan (ROC) from November 19, 2007 – June 20, 2010 and July 08 – August 24, 2010	
Supervisor	: Professor Jiann T'suen Lin	

S. No	Position	Institute	Country	Period
1.	Associate Professor	Department of Chemistry School of Applied and Basic Sciences Central University of Tamil Nadu Thiruvarur	India	March 30, 2023-till date
1.	Assistant Professor (Stage II, Academic Level 11)	Department of Chemistry School of Applied and Basic Sciences Central University of Tamil Nadu Thiruvarur	India	December 12, 2017- March 29,2023
2.	Assistant Professor (Stage I, Academic Level 10)	Department of Chemistry School of Applied and Basic Sciences Central University of Tamil Nadu Thiruvarur	India	April 06, 2013 – December 11, 2017
2.	Assistant Professor (On- contract)	Department of Chemistry School of Applied and Basic Sciences Central University of Tamil Nadu Thiruvarur	India	Sep 2010 – March 2013

# Professional Experience (Reverse Chronological order)

### > Awards, Prizes and other recognitions received

- Awarded "Raman Fellowship for Post Doctoral Research in USA for the year 2015-16" by UGC, India. (25 lakhs)
- Awarded "International Short Visit" by the Swiss National Science Foundation (SNSF), Switzerland to collaborate with Prof. Roger Alberto, School of Chemical and Molecular Sciences, University of Zurich, Switzerland for two months from June 2016-July 2016. (CHF 11800.00)
- Taiwan National Science Council Post Doctoral Fellow, 2007 2010, Prof. Jiann T. Lin's Research Group, Institute of Chemistry, Academia Sinica, Taiwan
- DST-SERB Fast-track under Young Scientist Scheme
- Qualified in **GATE** (Graduate Aptitude Test in Engineering/Sciences) and scored **81.75** percentile in 2001conducted nationwide by Indian Institutes of Technology, India.

- Qualified **CSIR Lectureship** in June 2003 conducted Nationwide by Council of Scientific and Industrial Research (CSIR), Government of India, New Delhi, India.
- Awarded **SERB international travel grant** in the year 2018 to present a paper in the "9<sup>th</sup> Asian Biological Inorganic Chemistry Conference" during December 09 – 14, 2018 is organized by National University of Singapore. (**25k**)
- Received **Prof. R. K. Barua Memorial Best Poster Prize 2019** in the 24<sup>th</sup> CRSI National Symposium in Chemistry (CRSI-NSC-24) was held in CSIR-CLRI Chennai from February 8 to 10, 2019.

### Country visited related academic work

China Taiwan Switzerland Germany United States of America Singapore

# Professional Reviewing Services/membership/member in Panel/Board

Reviewer for Inorganic Chemistry journal, ACS Publication.

Reviewer for ACS Omega journal, ACS Publication.

Reviewer for Polyhedron journal, Elsevier Publication

Reviewer for *Steroids* journal, Elsevier Publication

Life member of "Indian Crystallographic Association".

BOS member, Department of Chemistry, Holy cross college, Thiruchirappalli,

Tamil Nadu.

Academic connoisseur, Cauvery College for Women, Thiruchirappalli, Tamil Nadu. Life Member of "Chemical Research Society of India (CRSI)".

### > Research Interests

- Development of metallosynthetic nucleases and proteases
- Development of metal-based anticancer drugs
- Synthesis of metal-based fluorescent bio-imaging agents
- Designing of photodynamic therapy (PDT)
- Nanomedicine

# > Sponsored Projects

S.	Title of the Project	Funding	Amount of	Period of
No		Agency	Grant	support
1.	As PI, Fast-track under Young Scientist Scheme entitled "Toward the Development of metal- based Antcancer agents: DNA and Protein binding and cleaving properties of Copper (II) complexes and their Anticancer activity".	SERB	Rs. 25 lakhs	2013-2016 (Completed)
2.	As Co-PI, project entitled "Metal based medicine:Mixed ligand copper(II) complexes of diimines as chemical nuclease and protease and their anticancer activities".	CSIR	Rs. 13.6 lakhs	2013-2016 (completed)
3.	As PI, project entitled "Bio-degradable nanofiber encapsulated biofertilizer to enhance phosphorous and other micro nutrient uptake in rice"	DBT	*Overall sanctioned amount is 99 lakhs, allotted to CUTN is 919900.00	On going

\* Multi-institutional project (Five institutes are involved in this project).

## Publications & Citation indices: Total No. of International Publications: 24

	Google Scholar	Scopus	
Total Citation	2088	1903	
h-index	15	15	
Maximum single paper citation	596		
Average impact factor	4.56		

### Patents filed/published/granted

1. Indian Patent filed on "Mixed Ligand Copper(II) Complexes Containing Thiosemicarbazone Derivative and Diimine as Potential Anticancer Agents", Venugopal Rajendiran, Radhakrishnan Kartikeyan, and Mallayan Palaniandavar, Application number:202241044748 dt. 05.08.2022.

### > List of Publications

 Mixed Ligand Copper(II)-Diimine Complexes of 2- Formylpyridine-N<sup>4</sup>-Phenylthiosemicarbazone: Diimine Co-ligands Tune the in Vitro Nanomolar Cytotoxicity Radhakrishnan Kartikeyan, Dhanashree Murugan, Tamilarasan Ajaykamal, Loganathan Rangasamy, Marappan Velusamy, Mallayan Palaniandavarc and Venugopal Rajendiran, *Dalton Trans.* 2023, 52, 9148.

Publisher: Royal Society of Chemistry, Impact factor: 4.0

- Anjaneyulu Mamindla, Manikandan Varadhan, Radhakrishnan Kartikeyan, Anbalagan Amuthamozhi, Mohammad Abdulkader Akbarsha, Venugopal Rajendiran, Comparative DNA-/BSA-binding, DNA cleavage, and cytotoxic properties of copper(II) amino/salicyl-phenolate Schiff bases (phen) complexes that induce generation of phenoxyl radicals, *Polyhderon*, **2023**, 243, 116534.
   Publisher: *Elsevier*, Impact factor: 2.6
- Mamindla, A.; Varadhan, M.; Velusamy, M.; Ulaganathan, V.; Rajendiran, V. Crystal Structure of [2-({[2-(Dimethylamino-κN) Ethyl] Imino-κN} Methyl) Phenolato-κO](1, 10-Phenanthroline-κ 2N, N') Copper (II) Perchlorate. Acta Cryst. 2023, E79 (4), 259–263.
   Publisher: IUCr, Impact factor: 0.261
- 4. Folic Acid-Conjugated Mixed-Ligand Copper(II) Complexes as Promising Cytotoxic Agents for Triple-Negative Breast Cancers: A Case Study Using MDA-MB-231 Cell Sambantham Karpagam, Anjaneyulu Mamindla, Veeresh Kumar Sali, Reeja Sankaran Niranjana, Vaiyapuri Subbarayan Periasamy, Ali Abdullah Alshatwi, Mohammad Abdulkader Akbarsha and Venugopal Rajendiran, *Inorg. Chim. Acta.*, **2022**, 531, 120729. **Publisher:** *Elsevier*, Impact factor: 2.8
- 5. Identification of cytotoxic copper(II) complexes with phenanthroline and quinoline, quinoxaline or quinazoline-derived mixed ligands Kartikeyan Radhakrishnan, Themmila Khamrang, Karpagam Sambantham, Veeresh Kumar Sali, Upendra Chitgupi, Jonathan F. Lovell, A. Akbarsha Mohammad, Rajendiran Venugopal, *Polyhedron* 194, **2021**, 114886. **Publisher:** *Elsevier*, Impact factor: 2.6
- Induction of Redox-Mediated Cell Death in ER-Positive and ER-Negative Breast Cancer Cells by a Copper(II)-Phenolate Complex: An In Vitro and In Silico Study Vaiyapuri Subbarayan Periasamy, Anvarbatcha Riyasdeen, Venugopal Rajendiran, Mallayan Palaniandavar, Hanumanthappa Krishnamurthy, Ali Abdullah Alshatwi and Mohammad Abdulkader Akbarsha, *Molecules* 2020, 25, 4504.
   Publisher: MDPI, Impact factor: 4.6
- 7. ROS-mediated cell death induced by mixed ligand copper(II) complexes of L-proline and diimine: Effect of co-ligand Sambantham Karpagam, Radhakrishnan Kartikeyan, Pappaiyan Paravai Nachiyar, MarappanVelusamy, Mani Kannan, Muthukalingam Krishnan, Upendra Chitgupi, Jonathan F. Lovell, Mohammad Abdulkader Akbarsha and Venugopal Rajendiran, *J. Coord. Chem.* 2019, *72*, 3102–3127.
  Publisher: Taylor and Francis, Impact factor: *1.869*
- Metalloporphyrin nanoparticles: Coordinating diverse theranostic functions Shuai Shao, Venugopal Rajendiran, Jonathan F. Lovell, *Coordination Chemistry Reviews* 2019, 379, 99–120.
   Publisher: *Elsevier*, Impact factor: 20.6
- Assessing Photosensitizer Targeting Using Meso-Tetra(Carboxyphenyl) Porphyrin Upendra Chitgupi, Jonathan F. Lovell and Venugopal Rajendiran, *Molecules* 2018, 23, 892

Publisher: MDPI, Impact factor: 4.6

 Synthesis, structures, and DNA and protein binding of ruthenium(II)-p-cymene complexes of substituted pyridylimidazo[1,5-a]pyridine: enhanced cytotoxicity of complexes of ligands appended with a carbazole moiety Themmila Khamrang, Radhakrishnan Kartikeyan, Marappan Velusamy, Venugopal Rajendiran, Rajakumar Dhivya, Balaji Perumalsamy, Mohammad Abdulkadher Akbarshad and Mallayan Palaniandavar, *RSC Adv.*, **2016**, 6, 114143.

#### Publisher: Royal Society of Chemistry, Impact factor: 3.9

11. New [Ru(5,6-dmp/3,4,7,8-tmp)<sub>2</sub>(diimine)]<sup>2+</sup> complexes: Non-covalent DNA and protein binding, anticancer activity and fluorescent probes for Nuclear and protein components Venugopal Rajendiran, Mallayan Palaniandavar, Vaiyapuri Subbarayan Periasamy, Mohammad Abdulkader Akbarsha, *J. Inorg. Biochem.* **2012**, 116, 151.

#### Publisher: Elsevier, Impact factor: 3.9

 [Ru(phen)<sub>2</sub>(dppz)]<sup>2+</sup> as An Efficient Optical Probe for Staining Nuclear Components Venugopal Rajendiran, Mallayan Palaniandavar, Vaiyapuri Subbarayan Periyasamy, Mohamad Abdulkader Akbarsha, *J. Inorg. Biochem.* 2010, *104*, 217.

#### Publisher: Elsevier, Impact factor: 3.9

13. Induction of Cell Death by DNA Binding and Cleaving Ternary Copper(II) Complexes of L-tyrosine and Diimines: Role of Co-ligands on Anticancer activity Sethu Ramakrishnan, Venugopal Rajendiran, Mallayan Palaniandavar, Vaiyapuri Subbarayan Periasamy, Bangalore Suresh Srinag, Hanumanthappa Krishnamurthy, and Mohammad Abdulkader Akbarsha, *Inorg. Chem.* 2009, 48, 1309.

#### Publisher: American Chemical Society, Impact factor: 4.6

 Chromium-induced in vivo DNA changes in marine cyanobacterium Oscillatoria willei BDU 130511 Swaminathan Palanisami, Venugopal Rajendiran, Mallayan Palaniandavar, Lashmanan Uma, *International Journal on algae*, 2009, 11, 395.

### Publisher: Begell House, Impact Score: 0.443

Non-covalent DNA binding and cytotoxicity of certain mixed ligand ruthenium(II) complexes of 2,2'-dipyridylamine and diimines
 Venugopal Rajendiran, Mariappan Murali, Eringathodi Suresh, Mallayan Palaniandavar, Vaiyapuri Subbarayan Periasamy, Mohammad Abdulkader Akbarsha, *Dalton Trans.* 2008, 2157.

#### Publisher: Royal Society of Chemistry, Impact factor: 4.0

16. Mixed ligand ruthenium(II) complexes of bis(pyrid-2-yl)-/bis(benzimidazol-2-yl)dithioether and diimines: Study of non-covalent DNA binding and cytotoxicity Venugopal Rajendiran, Mariappan Murali, Eringathodi Suresh, Sarika Shinka, Kumaravel Somasundaram and Mallayan Palaniandavar, *Dalton Trans.* 2008, 148.

### Publisher: Royal Society of Chemistry, Impact factor: 4.0

 Cleavage of Proteins by a Mixed-Ligand Copper(II) Phenolate Complex: Hydrophobicity of the Diimine Coligand Promotes
 Venugopal Rajendiran, Mallayan Palaniandavar, Palanisami Swaminathan and Lakhsmanan Uma, *Inorg. Chem.* 2007, 46, 10446.

#### Publisher: American Chemical Society, Impact factor: 4.6

 Mixed Ligand Copper(II)-phenolate Complexes: Effect of Co-ligand on Enhanced DNA and Protein Binding, DNA Cleavage and Anticancer Activity
 Venugopal Rajendiran, Ramasamy Karthik, Mallayan Palaniandavar, Helen Stoeckli-Evans, Mohamad Abdulkader Akbarsha, Vaiyapuri Subbarayan Periyasamy, Bangalore Suresh Srinag and Hanumanthappa Krishnamurthy, *Inorg. Chem.* 2007, 46, 8208.

#### Publisher: American Chemical Society, Impact factor: 4.6

 Interaction of *rac*-[Ru(5,6-dmp)<sub>3</sub>]<sup>2+</sup> with DNA: Enantiospecific DNA Binding and Ligand-Promoted Extensive Exciton Coupling Palanisamy Uma Maheswari, **Venugopal Rajendiran**, Helen Stoeckli-Evans and Mallayan Planiandavar,\* *Inorg. Chem.* 2006, 45, 37.

#### Publisher: American Chemical Society, Impact factor: 4.6

Synthesis, Characterization and DNA-binding Properties of *rac*-[Ru(5,6-dmp)<sub>2</sub>(dppz)]<sup>2+</sup> - Enantiopreferential DNA Binding and Co-ligand Promoted Exciton Coupling
Palanisamy Uma Maheswari, Venugopal Rajendiran, Ramalingam Parthasarathi,
Venkatesan Subramanian, and Mallayan Palaniandavar\* *J. Inorg. Biochem.* 2006, *100*, 3.

#### Publisher: Elsevier, Impact factor: 3.9

 Structures and Spectra, and Binding Properties of Mixed Ligand Copper(II) Complexes of Iminodiacetic Acid: The Novel role of Diimine Co-ligand on DNA Conformation and Hydrolytic and Oxidative Double Strand Cleavage Bojayan Selvakumar, Venugopal Rajendiran, Palanisamy Umamaheswari, Stoeckli-Evans and Mallayan Palaniandavar\* J. Inorg. Biochem. 2006, 100, 316.

#### Publisher: Elsevier, Impact factor: 3.9

 Mixed Ligand Complexes of Ruthenium(II): The Role of 5,6-dmp Ligand on DNA Binding of the Complexes Palanisamy Uma Maheswari, Venugopal Rajendiran and Mallayan Palaniandavar\* Reji Thomas b, G.U. Kulkarni, *Inorg.Chim. Acta.* 2006, 359, 4601.

#### Publisher: Elsevier, Impact factor: 2.8

23. Copper(II) Complexes of Certain Pyridylmethylethylenediamines: Role of Sterically Hindered Ligands on DNA Binding and Cleavage Angamuthu Raja, **Venugopal Rajendiran**, Palanisamy Umamaheswari, Ramalingam Balamurugan, Colin A. Kilner, Malcolm A. Halcrow, Mallayan Palaniandavar\* *J. Inorg. Biochem.*, **2005**, *99*, 1717. (**Top 25 article**)

#### Publisher: Elsevier, Impact factor: 3.9

24. Enantiopreferential DNA Binding: [{(5,6-dmp)<sub>2</sub>Ru}2(bpm)]<sup>4+</sup> Induces B to Z Conformational Change on DNA Palanisamy Uma Maheswari, Venugopal Rajendiran, Mallayan Planiandavar\*, Ramalingam Parthasarathi, and Venkatesan Subramanian. *Bull. Chem. Soc. Jpn.* 2005, 78, 835. (Selected Paper)

#### Publisher: Chemical Society of Japan, Impact factor: 4.0

#### Book/Book Chapter Published

- 1. A Book on 'Development of chemosensor for the detection of heavy metal ions' Rajendiran Venugopal, Sathya Priya Varadharajan, Kartikeyan Radhakrishnan, Lembert Academic publishing, 2017, ISBN:978-3-330-03045-9.
- A book chapter on titled "Porphyrin and Phthalocyanine Radiolabeling", Venugopal Rajendiran, Sanjana Ghosh, Jonathan F. Lovell, Pages 49-78, Springer International Publishing AG, part of Springer Nature 2018, Print ISBN 978-3-319-67719-4, Online ISBN 978-3-319-67720-0.

#### **Research/Training/Teaching Experience:**

Teaching	: Integrated MS	c & MSc – 13 years	
Research Guidance	: PhD – 2 (On-go	ing);	
No. MSc & PGDLCT Project	: 35	No. of MPhil Awarded	:1
No. of PhD Awarded	: 02		
No. of PhD Thesis Submitted	: 01		
No. of invited talk delivered		: 34	
Paper presented/participated	in the conferences	: 42	

## Invited Lectures Delivered at National/International Level symposium / conferences / workshops

- DST sponsored symposium on 'Emerging Concepts and Trends in Bioinorganic Chemistry' organized by Chemistry Research Centre, National Engineering College, K. R. Nagar, Kovilpatti – 628 503 between 24 and 25<sup>th</sup> February, 2011.
- Modern Trends in Chemistry (MTC-16) One Day International Seminar on interface Between Chemistry & Biology organized by Department of Chemistry Vivekananda College, Madurai on 23<sup>rd</sup> December, 2011.
- Indian Science Academies sponsored Lecture Workshop on Bioinorganic Chemistry and its Applications", Madurai Kamaraj University, Madurai, September 28 – 30, 2012
- 4. Guest Lecture Programme for the Under-graduate Degree Chemistry students under UGC-Autonomy Grant (Extension Activity), organized by Department of

Chemistry, Ayya Nadar Janaki Ammal College, Sivaksai for the academic year 2012-13 on 19.01.2013.

- 5. DST- INSPIRE programme between 27.08.2013 to 31.08.2013 for the XI standard school students organized by Theivanai Ammal College for Women, Villupuram.
- 6. TEQIP sponsored two day workshop on Emerging Trends in Chemistry (ETRic'13) held between December 10 & 11, 2013 at Anna University, Thiruchirappalli.
- Indo-French Centre for Promotion of Advanced Research sponsored Indo-French seminar on Bio-inorganic Approaches to Current Health Problems, held during March 24-28, 2014 organized by Department of Chemistry, Pondicherry University, Pondicherry.
- Indian Science Academies sponsored Three-day Lecture Workshop on "Recent Trends in Chemistry" during April 4 - 6, 2014 at Department of Chemistry, Mother Teresa Women's University, Kodaikanal.
- Faculty Development Programme on "Better Engineering Skills through Better Chemistry Protocols" during 9-13 June 2013 organized by Department of Chemistry, National Institute of Technology, Calicut.
- 10. One day national level seminar on October 15, 2014 organized by Department of Chemistry, Madura College, Madurai.
- Academy Lecture Workshop on 'Emerging Trends in Chemical Sciences' during 09-11, October, 2015 organized by Virudhunagar Hindu Nadars' Senthikumara Nadar College (VHNSN), Virudhunagar.
- Two day National Conference on "Recent Frontiers in Bioinorganic and Medicinal Chemistry (RFBMC – 2015)" held between November 27 & 28, 2015 at Department of Chemistry, Sree Sowdambika College of Engineering, Aruppukottai, Virudhunagar.
- Delivered a keynote address in the State Level Students' Seminar on 24<sup>th</sup> February, 2016 organized by Department of Chemistry, Thiagarajar College, Madurai-9.
- 14. Delivered an invited lecture on 24<sup>th</sup> February, 2016 in the Department of Chemistry, NMSSVN College, Nagamalai, Madurai.
- 15. Delivered an invited lecture in the Transition 2018 Two-day National Workshop on "Recent Advances in Chemistry" held between 23 & 24 January, 2018 organized by Department of Chemistry, Central University of Tamil Nadu, Thiruvarur
- 16. Delivered an invited lecture in the National Seminar on "Science and Technology for Sustainable Future" on 26<sup>th</sup> February 2018 organized by The Research Department of

Fisheries & Aquaculture, St. Albert's College (Govt. aided & Autonomous), Ernakulam.

- Delivered an invited lecture on "Empowering Nurses: Building Technological Competencies" on October 23, 2018 in Vinayaka Mission's college of Nursing, Karikal.
- 18. Delivered an invited lecture in the Two-day National Conference on "Recent advances in Chemistry" Organized by Department of Chemistry, Anna University, Chennai January 4-5, 2019.
- 19. Delivered an invited lecture in the National Workshop on "Research Methodology, Writing Practices and Language and Soft skills" Organized by Department of Physics, Pandalam College, Kerala January 30-31, 2019.
- 20. Delivered an invited lecture in the International Colloqium on "Biovision-2019 (ICB-2019)" Organized by SIR ISSAC NEWTON COLLEGE OF ARTS AND SCIENCE February 28, 2019.
- Delivered an invited lecture in the One Day National Seminar on "Recent Trends in Chemical Sciences" Organized by PG & Research Department of Chemistry Periyar E. V. R. College, Tiruchirappalli, March 01, 2019.
- 22. Delivered an invited lecture on "Development of Receptor Mediated Cancer Targeting Agents" on September 23, 2019 in the one-day Symposium on Emerging Trends in Chemistry (ETC-2019) organized by PG & Research Department of Chemistry, Thiru Vi. Ka. Government Arts College, Thiruvarur.
- 23. Delivered an invited lecture on "**New Trends in Research on Basic Sciences**" on February 27, 2020 in the One-day Seminar-National Science Day Celebration organized by Department of Mathematics, Physics and Chemistry Swami Dayananda College of Arts & Science, Thiruvarur.
- 24. Delivered an invited lecture on "Metal complexes as Anticancer Agents" on June 11, 2020 in the webinar organized by Department of Applied Chemistry, Sri Venkateswara College of Engineering, Pennalur, Sriperumbudur Tk 602 117, Tamil Nadu.
- 25. Delivered an invited lecture on **"Evolving Various Strategies to Target Cancer Cells''** on July 22, 2020 in the Five Days Virtual Faculty Development Programme On "Vital Visionary Approach for Researchers-Recent Chemistry Perspective" organized by School of Science and Humanities, Department of Chemistry, Kongu Engineering College Perundurai, Erode, Tamil Nadu.
- 26. Delivered an invited lecture on "**Targeting Cancer Cells with Small Molecules**" on March 31, 2021, in the Faculty Enrichment Programme on "Advanced Materials and its Applications (Under UGC-CPE Grant)" organized by Postgraduate and Research Department of Chemistry, Vivekananda College, Tiruvedakam West, Madurai.
- 27. Delivered an invited lecture on ""Copper(II) Complexes as Cytotoxic Agents" on june 22, 2021 in the A Five-Day Virtual Faculty Development Programme on "Advances in Chemical Research" during 21.06.21 25.06.21 *Organized by* Department of Science and Humanities & Centre for Faculty Development, N. G. P Institute of Technology, Coimbatore.

- 28. Delivered an invited lecture on "Copper(II) Complexes as Potential Cytotoxic Agents" on August 28, 2021 in the one-week online faculty development programme (FDP) on "Emerging Trends in Chemical Sciences" during 23.08.21 28.08.21 Organized by Department of Chemistry, Saranathan College of Engineering, Trichy-12.
- 29. Delivered an invited talk on "Everyday Science Global Science for Global Wellbeing" on February 28, 2023 organized by Department of Education, Central University of Tamil Nadu, Thiruvarur.
- 30. Delivered a lecture on "Theory & Instrumentation: UV-VIS Spectroscopy" on 13<sup>th</sup>
   February, 2023 in the STUTI-21, organized by Department of Chemistry, CUTN & NIT Warangal during 08<sup>th</sup> 14<sup>th</sup> June, 2023
- 31. Delivered an invited talk on "DNA/protein Binding, DNA cleavage, and Cytotoxicity of Copper(II) Mixed-ligand Complexes" on 7<sup>th</sup> March 2023 in the National Conference On Chemical, Biological and Medical Sciences (NCCBMS-23) organized by PG and Research Department of Biochemistry Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli.
- 32. Delivered a lecture on "Absorption Spectroscopy" on 21<sup>st</sup> June, 2023 in the STUTI-21, organized by Department of Chemistry, CUTN & NIT Warangal during 21<sup>st</sup> – 27<sup>th</sup> June, 2023.
- 33. Delivered a lecture in a Refresher Course in Chemistry on 8<sup>th</sup> July 2023, organized by UGC-HRDC & Department of Chemistry Pondicherry University during 05.07.23 18.07.23.
- 34. Delivered a lecture in a Refresher Course in Chemistry on 11<sup>th</sup> July 2023, organized by UGC-HRDC & Department of Chemistry, Bharathiar University during 05.07.23 18.07.23.

### > National/International Conferences Participated

- 1. Participated in the DST sponsored 'Winter School on Bio-Inorganic Chemistry', Department of Chemistry, Bharathidasan University, Tiruchirappalli. November 25 -December 07, 2002.
- 2. 'Fourth National Symposium in Chemistry', National Chemical Laboratory, Pune, February 1-3, 2002.
- 3. 'National Workshop on Molecular Modeling', National Institute of Pharmaceutical Education and Research (NIPER), Punjab, July 22-26.
- 4. 'Fifth National Symposium in Chemistry', Central Leather Research Institute, Chennai, February 7-9, 2003.
- 5. 'Tenth Symposium on Modern Trends in Inorganic Chemistry', Indian Institute of Technology, Bombay, December 15-17, 2003

- 6. National Symposium on 'The Double Helix: Fifty Years and Beyond' Bharathidasan University, during January 19-20, 2004.
- 7. 'Refresher Course on Lasers and Applications in Chemical Processes' National Centre for Ultrafast Processes, University of Madras, Chennai, January 19-31, 2004.
- 8. Sixth National Symposium in Chemistry, Indian Institute of Technology, Kanpur. February 7-9, 2004.
- Third Symposium on Advances in Bioinorganic Chemistry (SABIC-2004) in conjunction with Second Asian Biological Inorganic Chemistry Conference (AsBIC-II) December 5-10, 2004 at Goa, India.
- 10. Second Regional CRSI Symposium in Chemistry, School of Chemistry, Bharathidasan University, January 7-8, 2005.
- 11. National Workshop on Molecular Electronics Structure and Dynamics, School of Chemistry, Bharathidasan University, March 22-24, 2005.
- 12. National workshop on Bioinorganic Chemistry, Indian Institute if Science, Bangalore, October 19-21, 2005.
- 13. 'Eleventh Symposium on Modern Trends in Inorganic Chemistry', Indian Institute of Technology, Delhi, December 08-10, 2005.
- 14. Third Asian Biological Inorganic Chemistry Conference (AsBIC-III), October 31-November 03, 2006, Nanjing University, P R China.
- 15. Second Annual Plastic Electronics Asia 2009, June 08 10, Taipei, Taiwan (ROC).
- 2009 International Symposium on Dye-sensitized Solar cells, October 22 & 23, Taiwan (ROC)
- 17. 'Workshop on Frontiers in Catalysis Research', October 01, 2010, National College, Tiruchirappalli, Tamil Nadu, India.
- 18. 13<sup>th</sup> CRSI National Symposium in Chemistry & 5<sup>th</sup> CRSI-RSC Symposium in Chemistry, February 04-06, NISCER, Bhubaneswar, India.
- 19. Symposium on 'Modern Trends in Inorganic Chemistry (MTIC-XIV)', 10-13 December 2011, School of Chemistry, University of Hyderabad.
- 20. 'Symposium on Modern Trends in Chemistry (MTC-16)-One International Seminar on Interface Between Chemistry & Biology' 23<sup>rd</sup> December 2011 organized by Vivekananda College, Tiruvedakam West, Madurai.
- 21. **15<sup>th</sup> CRSI National Symposium in Chemistry**, organized by Banaras Hindu University, Varanasi, India, during February 1-3, 2013.
- 22. 16th CRSI National Symposium in Chemistry, February 7-9, 2014 organized by IIT

Bombay, India.

- 23. Participated in the National Workshop on "**Techniques in Animal Cell Culture and In vitro Toxicology**" during June 21-30, 2014 organized by Mahatma Gandhi -Doerenkamp Centre (MGDC) for Alternatives to Use of Animals in Life Science Education, Bharathidasan University, Thiruchirappalli.
- Presented a poster on DNA and Protein Binding and Cleaving Certain L-Proline and Diimine Based Mixed Ligand Copper(II) Complexes Act as Cytotoxic Agents
   S. Karpagam, R.Kartikeyan, P. Paravai Nachiyar, M. Kannan, M. Krishnan, R. Dhivya, M. A. Akbarsha, M. Velusamy, M. Palaniandavar, V. Rajendiran in the RSC symposium on 'Inorganic Chemical Biology' during March 17 - 18, 2017 is organized by Madurai Kamaraj University, Madurai, India.
- 25. Design and Synthesis of DNA and Protein Binding and Cleaving Mixed Ligand Copper(II) complexes for Anticancer Agents R. Kartikeyan, A. Amuthamozhi, M. Kannan, M. Krishnan, R. Dhivya, M. A. Akbarsha, M. Velusamy, M. Palaniandavar, and V. Rajendiran in the RSC symposium on 'Inorganic Chemical Biology' during March 17 - 18, 2017 is organized by Madurai Kamaraj University, Madurai, India.
- Participated in the Conversations in the Disciplines (CID) Meeting 2016-2017 "Interdisciplinary Conversations in Blood Brain Barrier Re-Modelling". February 24th, 2017, Organized by Clinical & Translational Research Center, University at Buffalo, Buffalo, NY, USA.
- 27. Participated in the 4<sup>th</sup> Annual Symposium: RNA Science and Its Applications and workshop on *microRNA detection using nanoswitch technology* during April 16-17, 2017 organized by The RNA Institute, University at Albany, NY, USA.
- 28. Attended 13<sup>th</sup> Annual CFAR HIV Symposium on April 06, 2017 hosted by University of Miami, Miller School of Medicine, Miami, FL, USA.
- 29. Attended The 2017 Baker symposium Quo vadis: The Boundless Trajectories on April 08, 2017.
- 30. Attended 13th Annual LC-MS/MS Workshop on Environmental and Food Safety between June 11-12, 2017organized by Department of Chemistry, University at Buffalo, USA.
- 31. Presented a poster on Design and Synthesis of Amide and Diimine Containing Mixed Ligand Cu(II) Complexes for Artificial Metallonucleases and Metalloproteases S. Karpagam, N. SatheesKumar, V. Rajendiran in the "2<sup>nd</sup> International Conference on Advances in New Materials" organized by University of Madras, India.
- 32. Development of Imine Based Chemosensor for the Detection of Metal ions and Certain Nucleic Acids
  R. Kartikeyan, M. Saranya and V. Rajendiran in the "2<sup>nd</sup> International Conference on Advances in New Materials" organized by University of Madras, India.

- 33. Presented a poster on Selective Recognition of DNA G-Quadruplex and i-motif Structures by a Thiazole Orange Appended Cyclen in the presence of Cu(II) ion Venugopal Rajendiran, Javier Trifundio, Janet R Morrow in the "9<sup>th</sup> Asian Biological Inorganic Chemistry Conference" during December 09 – 14, 2018 is jointly organized by National University of Singapore, Nanyang Technological University, Singapore.
- 34. Presented a poster in the 24<sup>th</sup> CRSI National Symposium in Chemistry (CRSI-NSC-24) was held in CSIR-CLRI Chennai from February 8 to 10, 2019 and **received Best Poster Presentation Award**.
- 35. Presented a poster on "Development of anthraquinone containing quinoxaline for sensing metal ions, S. Shana, R. Kartikeyan, B. Anamika, R. Gayathri, V. Rajendiran in the international webconferenceon Recent Trends in Scientic Research held on August 3<sup>rd</sup> & 4<sup>th</sup>, 2020 organized by Postgraduate & Research Department of Chemistry, Dr. Ambedkar Government Arts College, Chennai 600 039, Tamil Nadu, India. (**Received best poster presentation award**).
- 36. Presented a poster on Thiophene based AKR1C3 inhibitors to target hormone dependent cancers M. Anjaneyulu, M. Anju, S. Veeresh Kumar, V. Madhurima, Peter Muller, Roger Alberto, and V. Rajendiran, in the "Emerging Frontiers in Chemical Science-National Conference" during December 04 to 05, 2020 organized by Farook College (Autonomous), Kerala, India.
- 37. Oral presentation on "Targeting cancer cells using cytotoxic copper(II) complexes loaded functionalized mesoporous silica nanoparticle M. Kiruthika, S. Karpagam, V. Rajendiran, N. Kishore, K. Ruckmani. in the "Emerging Frontiers in Chemical Science-National Conference" during December 04 to 05, 2020 organized by Farook College (Autonomous), Kerala, India.
- 38. Oral presentation on "Design and synthesis of thiophene based 17β-hydroxysteroid dehydrogenase type 5 (17β-HSD5) inhibitors to target hormone dependent cancers. M. Anjaneyulu, M. Anju, S. Veeresh, V. Madhurima, Peter Muller, Roger Alberto, and V. Rajendiran in the National Conference on Frontiers in Chemical Sciences held during March 29 & 30, 2021, organized by Department of Chemistry, Central University of Tamil Nadu, Thiruvarur 610005.
- 39. Oral presentation on "Targeting cancer cells using dual stimuli responsive-delivery of cytotoxic copper(II) complexes loaded in functionalized mesoporous silica nanoparticle". M. Kiruthika, S. Karpagam, V. Rajendiran, N. Kishore, K. Ruckmani in the National Conference on Frontiers in Chemical Sciences held during March 29 & 30, 2021, organized by Department of Chemistry, Central University of Tamil Nadu, Thiruvarur 610005.
- 40. Presented a poster on "Development of anthraquinone containing quinoxaline for sensing metal ions, S. Shana, R. Kartikeyan, B. Anamika, R. Gayathri, V. Rajendiran in the National Conference on Frontiers in Chemical Sciences held during March 29 & 30, 2021, organized by Department of Chemistry, Central University of Tamil Nadu, Thiruvarur 610005.

- 41. Oral presentation on "Synthesis of water soluble mixed-ligand Cu(II) complexes containing L-Ornithine and diimines:DNA/Protein binding, DNA cleavage and in vitro anti-proliferative activity". M. Anjaneyulu, P. Subhasree, R. Kartikeyan, R. Loganathan, V. Rajendiran in the International virtual conference on Future Prospects in Chemical Research held during December 21<sup>st</sup> and 22<sup>nd</sup>, 2022, organized by the PG and Rsearch Department of Chemistry, Seethalakshmi Ramaswami College, Trichirappalli, Tamil Nadu.
- 42. Oral presentation on "Comparative DNA/BSA binding, generation of phenoxyl radical, DNA cleavage, and cytotoxic properties between mixed-ligand copper(II) complexes containing amino-phenolate and salicyl-phenolate Schiff bases as primary ligands and 1,10-phenanthroline as co-ligands". M. Anjaneyulu, V. Manikandan, R. Kartikeyan, A. Amuthamozhi, M.A. Akbarsha, V. Rajendiran in the national conference on Advanced Metal-Organic Solids and their Applications (NCAMOSA-2023) held during February 22, 2023, organized by the Department of Chemistry, Thiruvalluvar University, Serkkadu, Vellore, Tamil Nadu.

# > Academic/Administrative Responsibilities

Sl.No	Administrative contributions/responsibilities	Date of the assignment	
		From	То
a.	<b>Nodal officer</b> for all India survey on higher education for CUTN	2010	2011
b.	Nodal officer for all India survey on higher education for CUTN	2011	2012
с.	Faculty in-charge of Science club, CUTN	Jan 2011	Apr 2013
d.	Organized "National Science day"	Feb 2011	
e.	Organized the 1 <sup>st</sup> Annual Sports and Cultural meet 2011	Apr 2011	-
f.	Academic Counsellor for CUCET 2011	2011	-
g.	Deputy Superintendent for CUCET 2011	2011	
h.	Organizing committee member for National day 2011- Maulana Abdulkalam Azad commemorative celebration	Nov 2011	-
i.	Coordinator for Ad hoc board of studies experts committee meeting	Dec 19 2011	Dec 20 2011
j.	Editorial committee member for Annual reports	2011	2014
k.	Faculty in-charge, Sports club, CUTN	Oct 2011	2014
1.	Faculty in-charge organizing educational tour/field trip to visit VSSC, Thiruvanathapuram, Kerala	Mar 21, 2012	Mar 22, 2012
m.	Organized the 2 <sup>nd</sup> Annual Sports and Cultural meet 2012	May 02, 2012	-
n.	Organized Science events in Thiruvarur and Thanjavur district on National Science day	Feb 28, 2013	-
0.	Faculty incharge for organizing educational tour/field trip to see <b>sophisticated instrumentation facility</b> at IIT Madras and IGCAR	Mar 16, 2014	Mar 18, 2014
p.	Organized the 3 <sup>rd</sup> Annual Sports and Cultural meet 2014	Mar 24, 2014	-
q.	Warden Boys Hostel	July 04, 2013	March 2014
r.	Alumni Coordinator	Oct 10, 2015	Till date
s.	Cultural Coordinator	Oct 10, 2015	May 30, 2016
t.	Member of NSS Advisory committee	October 07, 2015	Till date
u.	Member of Anti-ragging squad	July31, 2015	June 30, 2021
v.	Member of Tri-party agreement	August 21, 2018	June 30,2021
w.	Member of official Language Implementation Committee	September, 2018	Till date
х.	Academic council member	March 08, 2019	Till date
у.	Nodal officer for I-STEM	June 11, 2019	Till date
q.	NEP-2020 conference -Convener, Cultural Committee	May 27-28, 2022	-

Updated on: August 04, 2023