

FACULTY PROFILE



Name : Dr. M. VENKATESH PERUMAL

Designation : Associate Professor (Grade III)

Department : Chemistry

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Google Scholar: <https://scholar.google.com/citations?hl=en&user=TBWfMOgAAAAJ>

1. EDUCATIONAL QUALIFICATION:

Degree	Branch / Specialization	Institute/University	Year of Passing
Ph.D.	Chemistry	Annamalai University, Chidambaram	2012
M.Phil.	Chemistry	The American College (Autonomous), Madurai	2009
M.Sc.	Chemistry	Annamalai University, Chidambaram	2008
B.Sc.	Chemistry	Ayya Nadar Janaki Ammal College (Autonomous), Sivakasi	2006

2. PROFESSIONAL / INDUSTRIAL EXPERIENCE :

Sl.No	University/College	Designation	Period	
			From	To
1.	Ramco Institute of Technology, Rajapalayam	Associate Professor (Grade III)	01.02.2024	Till date
2.	Ramco Institute of Technology, Rajapalayam	Assistant Professor (Sr.Grade)	01.01.2023	31.01.2024
3.	Ramco Institute of Technology, Rajapalayam	Assistant Professor	01.06.2017	31.12.2022
4.	Bannari Amman Institute of Technology, Sathyamangalam	Assistant Professor	02.05.2013	09.05.2017

5.	Sri Kaliswari College (Autonomous), Sivakasi	Assistant Professor	17.08.2012	30.04.2013
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3. RESEARCH AREA

Organic Chemistry, Organometallics, Computational Chemistry, Nanotechnology

3.1. RESEARCH EXPERIENCE

Sl.No	University/College	Designation	Period		Total Years
			From	To	
1.	The American College, Madurai	M.Phil. Scholar	11.06.2008	29.06.2009	1 Year 19 Days
2.	Annamalai University, Chidambaram	Ph.D. Research Scholar	02.12.2009	03.12.2012	3 Years 2 Days

M.Phil. Thesis Title & Guide Name:

–Synthesis of Nitroalkanes by Henry Reaction|| – Completed on 29 June 2009 – Under the Guidance of Dr.K.John Adaikalasamy, Professor, Department of Chemistry, The American College, Madurai.

Ph.D. Thesis Title & Guide Name:

Joining Date: 04.12.2009

Synopsis Submission Date: 09.05.2012

Thesis submitted on: 29.06.2012

–Synthesis, Photophysical and Computational Studies of Phenanthrimidazole Derivatives - Hole Transport Materials|| – **Awarded** on 3rd Dec. 2012 – Under the Guidance of Dr.J.Jayabharathi, Professor, Department of Chemistry, Annamalai University, Chidambaram.

3.2. VISITING FELLOWSHIP PROGRAMME

Conferred as a Visiting Fellow of the Year 2016-2017 in Jawaharlal Nehru Centre for Advanced Scientific Research (*JNCASR*), Bangalore for a period of three months.

3.3 SUPERVISORY SUPPORT AND PROJECT GUIDANCE:

Research Stage	Title of work / thesis	University where the work was carried out
Project Guidance (under PG Level)	Synthesis, characterization and photophysical studies of novel benzimidazole derivative	Madurai Kamaraj University
Student Name		
1. I. Manikandan		
2. I. John Britto	Synthesis, photophysical and computational studies of fluoro substituted benzimidazole derivative	Madurai Kamaraj University

<p>Project Guidance (under UG Level)</p> <p>1. Arun Priyan T 2. Gnanaraj S 3. Gopal Raj S 4. Ganesh S</p> <p>(IV Year B.E. Civil Engineering)</p>	<p>Determination and Eco-friendly Suppression of Fluoride Contamination in Ground Water Samples, in and around the Villages of Rajapalayam Taluk of Virudhunagar District, Using Activated Carbon Constituents of <i>Carica Papaya</i> – A Natural Adsorbent.</p> <p>(Funded by TNSCST, DoTE, Chennai)</p>	<p>Ramco Institute of Technology, Rajapalayam</p>
<p>1. R. S. Aravindhana 2. B. Dhivahar 3. A. Mohamed Vasim (IV Year B.E. Civil Engineering)</p>	<p>Detection and eco-friendly suppression of heavy metal contamination in effluents from tannery and dyeing industries using activated carbon.</p>	<p>Ramco Institute of Technology, Rajapalayam</p>
<p>1. S. Anto Sherlina 2. R. Harshani 3. S. Sathya (IV Year B.E. Civil Engineering)</p>	<p>Experimental Study on Effect of Firework Pollutants in Surrounding Soil and Water.</p>	<p>Ramco Institute of Technology, Rajapalayam</p>
<p>1. I. Harini Durga 2. T. Kiruthika (IV Year B.E. ECE)</p>	<p>Synthesis and Low-Temperature Sintering of Copper Nanoparticle Pastes for Microelectronic Packaging</p>	<p>Ramco Institute of Technology, Rajapalayam</p>

3.4 RESEARCH GUIDESHIP

Guideship approval for Ph.D./M.S (By Research) from Anna University, Chennai on December 2013 (New Ref. No. 2270785 /Old Ref. No. 22.07.32).

4. PUBLICATIONS

4.1 JOURNAL PUBLICATIONS

1. **M.Venkatesh Perumal***, S.Nagarajan, G.Kanthimathi, T.Usharani, M.Anandakumar, Lanthanum Oxide Nanoparticles Synthesis Using Plant Extracts: A Greener Approach, Journal of Molecular & Engineering Materials, 2025, Vol 13, Issue 4, p1, DOI: 10.1142/S2251237325500121.
2. R. Vijayakumar, R. Tamilarasan, K. Jayamoorthy, **M. Venkatesh Perumal**, Structural elucidation and computational studies of novel bidentate organometallic complexes of 2-thiophene carboxylic acid with ethyl-2-amino acetate for antidiabetic applications, Journal of Molecular Structure, Volume 1334, 5 July 2025, 141829, <https://doi.org/10.1016/j.molstruc.2025.141829>.
3. **M.Venkatesh Perumal***, S.Nagarajan, R.Srinivasan, K.Jayamoorthy, T. Usharani, "Green Synthesis of Copper Nanoparticles Using Flower Extracts: A Promising Route For Enhanced Microelectronics Packaging", Journal of Molecular and Engineering Materials,

Vol. 12, No. 04, 2450010 (2024) (<https://doi.org/10.1142/S2251237324500102>, Indexed in Web of Science & ESCI).

4. **M. Venkatesh Perumal**, A. Manicka Mamallan, V. Ragavan, ||Determination and eco-friendly suppression of fluoride contamination in ground water samples using activated carbon constituents of Carica Papaya – A Natural Adsorbent||, Materials Today: Proceedings, 2023, Elsevier. <https://doi.org/10.1016/j.matpr.2023.07.064>.
5. K.Jayamoorthy, N.R.Rajagopalan, S.M.Prakash, B.Subash, G.Murugan, K.I.Dhanalekshmi, S.Suresh, R.Sasikala, K.Saravanan, **M.Venkatesh Perumal** –Catalytic synthesis and characterization of aryl benzimidazole and its interaction with TiO₂ nanoparticles: ESIPT process|| Chemical Physics Impact, Volume 6 (2023) 100184. <https://doi.org/10.1016/j.chphi.2023.100184> (SCI Indexed, IF 0.639).
6. S. Godwin Barnabas, K. Arun Vasantha Geethan, **M. Venkatesh Perumal**, Recycling of Waste Crumb Rubber into a Commercial Materials, Journal of Rubber Research, 2021, DOI: <https://doi.org/10.1007/s42464-021-00103-w> (IF: 0.353). Published on May 27, 2021. (Retracted article).
7. **M. Venkatesh Perumal**, V. Sathish, M. Logesh, Photophysical and Theoretical investigations of Diarylimidazole derivative with application as a Fluorescence Sensor for Fe(III), Journal of Molecular Structure, Volume 1224, 15 January 2021, 129185. (IF: 2.463)
8. I.Manikandan, **M. Venkatesh Perumal**, K.Jayamoorthy, Synthesis, characterization, physico-chemical and DFT studies of potential organic NLO materials: Experimental and theoretical combined study, Silicon, Vol. 11, 2019, 425-435. (IF: 1.499)
9. E.Sathiyaraj, **M.Venkatesh Perumal**, E.R.Nagarajan, C.Ramalingan, Functionalized zinc(II) dithiocarbamate complexes: Synthesis, spectral and molecular structures of bis(N-cyclopropyl-N-4-methoxybenzylidithio carbamato-S,S')zinc(II) and (2,2'-bipyridine)bis(N-cyclopropyl-N-4-methoxybenzylidithiocarbamato-S,S') zinc(II), Journal of Saudi Chemical Society, Vol. 22, 2018, 527-537. (IF: 3.517).
10. C.Karunakaran, J. Jayabharathi, **M. Venkatesh Perumal**, V. Thanikachalam, Prasoon Kumar Takur, Electronic properties of phenanthrimidazoles as hole transport materials in organic light emitting devices and in photoelectron transfer to ZnO nanoparticles - J. Phys. Org. Chem. Vol. 26, 2013, 386-406. (IF: 1.536)
11. J. Jayabharathi, V. Thanikachalam, N. Srinivasan, **M. Venkatesh Perumal**, Fluorescence spectral studies of some imidazole derivatives, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, Vol. 90, 2012, 125-130. (IF: 3.232)
12. J. Jayabharathi, V. Thanikachalam, N. Srinivasan, **M. Venkatesh Perumal**, Light-

- emitting materials from cyclometalated heteroleptic iridium(III) complexes - A physicochemical study, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 87, 2012, 119-125. (IF: 3.232)
13. J. Jayabharathi, V. Thanikachalam, **M. Venkatesh Perumal**, Photophysical studies of fused phenanthrimidazole derivatives as versatile π -conjugated systems for potential NLO applications, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 92, 2012, 113-121. (IF: 3.232).
 14. J. Jayabharathi, V. Thanikachalam, **M. Venkatesh Perumal**, A study on the binding interaction between the imidazole derivative and bovine serum albumin by fluorescence spectroscopy, *Journal of Luminescence*, Vol. 132, 2012, 707-712. (IF: 3.280).
 15. J. Jayabharathi, V. Thanikachalam, N. Srinivasan, **M. Venkatesh Perumal**, Synthesis, spectral studies and solvatochromic analysis of novel imidazole derivatives, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 89, 2012, 194-200. (IF: 3.232)
 16. J. Jayabharathi, V. Thanikachalam, K. Brindha Devi, **M. Venkatesh Perumal**, Optical properties of organic nonlinear optical crystal—A combined experimental and theoretical study, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 86, 2012, 69-75. (IF: 3.232)
 17. J. Jayabharathi, V. Thanikachalam, **M. Venkatesh Perumal**, Physicochemical and solvatochromic analysis of an imidazole derivative as NLO material, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 85, 2012, 31-37. (IF: 3.232)
 18. J. Jayabharathi, V. Thanikachalam, **M. Venkatesh Perumal**, Studies on interaction between an imidazole derivative and bovine serum by spectral methods, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 95, 2012, 622-626. (IF: 3.232)
 19. J. Jayabharathi, **M. Venkatesh Perumal**, V. Thanikachalam, Photophysical and computational studies of novel heterocyclic imidazole derivatives containing trifluoromethyl group substituent, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 95, 2012, 497-504. (IF: 3.232)
 20. J. Jayabharathi, V. Thanikachalam, **M. Venkatesh Perumal**, Characterization, Photophysical and DFT calculation study on 2-(2,4-difluorophenyl)-1-(4-methoxyphenyl)-1H-imidazo[4,5-f][1,10]phenanthroline ligand, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 95, 2012, 614-621. (IF: 3.232)
 21. J. Jayabharathi, V. Thanikachalam, K. Saravanan, **M. Venkatesh Perumal**, New iridium complexes with cyclometalated 2-arylimidazole ligands as highly efficient

- saturated green emitters, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 91, 2012, 158-165. (IF: 3.232)
22. J. Jayabharathi, V. Thanikachalam, **M. Venkatesh Perumal**, N. Srinivasan, Synthesis, Crystal Structure, Kamlet-Taft and Catalan Solvatochromic Analysis of Novel Imidazole Derivatives, *Journal of Fluorescence*, Vol. 22, 2012, 409-417. (IF: 2.093).
 23. J. Jayabharathi, V. Thanikachalam, M. Padmavathy, **M. Venkatesh Perumal**, Photophysical Properties of Novel Picrate Derivatives – Solvent Effect, *Journal of Fluorescence*, Vol. 22, 2012, 269-279. (IF: 2.093)
 24. J. Jayabharathi, V. Thanikachalam, K. Brindha Devi, **M. Venkatesh Perumal**, Kamlet-Taft and Catalan Studies of Some Novel Y-Shaped Imidazole Derivatives, *Journal of Fluorescence*, Vol. 22, 2012, 737-744. (IF: 2.093)
 25. J. Jayabharathi, V. Thanikachalam, **M. Venkatesh Perumal**, K. Jayamoorthy, Solvatochromic Studies of Fluorescent Azo Dyes: Kamlet-Taft (π^* , α and β) and Catalan (Spp, SA and SB) Solvent Scales Approach, *Journal of Fluorescence*, Vol. 22, 2012, 213-221. (IF: 2.093)
 26. J. Jayabharathi, V. Thanikachalam, N. Rajendraprasath, K. Saravanan, **M. Venkatesh Perumal**, Antioxidant potential and antimicrobial screening of some novel imidazole derivatives: Greenway efficient one pot synthesis, *Medicinal Chemistry Research*, Vol. 21, 2012, 1850-1860. (IF: 1.783)
 27. J. Jayabharathi, V. Thanikachalam, K. Jayamoorthy, **M. Venkatesh Perumal**, Computational studies of 1,2-disubstituted benzimidazole derivatives, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 97, 2012, 131-136. (IF: 3.232)
 28. J. Jayabharathi, V. Thanikachalam, K. Brindha Devi, **M. Venkatesh Perumal**, Binding interaction of bioactive imidazole with bovine serum albumin - A mechanistic investigation, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 83, 2011, 587-591. (IF: 3.232)
 29. J. Jayabharathi, V. Thanikachalam, K. Saravanan, **M. Venkatesh Perumal**, Spectrofluorometric studies on the binding interaction of bioactive imidazole with bovine serum albumin: A DFT based ESIPT process, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol 79, 2011, 1240-1246. (IF: 3.232)
 30. J. Jayabharathi, V. Thanikachalam, N. Srinivasan, **M. Venkatesh Perumal**, Luminescent study on the binding interaction of bioactive imidazole with bovine serum albumin - A static quenching mechanism, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 84, 2011, 233-237. (IF: 3.232)
 31. J. Jayabharathi, V. Thanikachalam, **M. Venkatesh Perumal**, N. Srinivasan, Fluorescence resonance energy transfer from a bio-active imidazole derivative 2-(1-

- phenyl-1H-imidazo[4,5-f][1,10]phenanthroline-2-yl)phenol to a bioactive indoloquinolizinesystem, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 79, 2011, 236-244. (IF: 3.232)
32. J. Jayabharathi, V. Thanikachalam, **M. Venkatesh Perumal**, Mechanistic investigation on binding interaction of bioactive imidazole with protein bovine serum albumin - A biophysical study, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 79, 2011, 502-507. (IF: 3.232)
33. J. Jayabharathi, V. Thanikachalam, **M. Venkatesh Perumal**, N. Srinivasan, A physicochemical study of azo dyes: DFT based ES IPT process, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 83, 2011, 200-206. (IF: 3.232)
34. J. Jayabharathi, V. Thanikachalam, N. Srinivasan, **M. Venkatesh Perumal**, K. Jayamoorthy, Physicochemical studies of molecular hyperpolarizability of imidazole derivatives, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 79, 2011, 137-147. (IF: 3.232)
35. J. Jayabharathi, V. Thanikachalam, N. Srinivasan, **M. Venkatesh Perumal**, Physicochemical studies of green phosphorescent light-emitting materials from cyclometalated heteroleptic iridium(III) complexes, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 79, 2011, 338-347. (IF: 3.232)
36. J. Jayabharathi, V. Thanikachalam, K. Saravanan, N. Srinivasan, **M. Venkatesh Perumal**, Physicochemical properties of organic nonlinear optical crystal from combined experimental and theoretical studies, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 78, 2011, 794-802. (IF: 3.232)
37. J. Jayabharathi, V. Thanikachalam, M. Padmavathy, **M. Venkatesh Perumal**, Solvatochromic analysis of some N-nitroso oxime derivatives - Taft and Catalan approach, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 81, 2011, 363-371. (IF: 3.232)
38. J. Jayabharathi, V. Thanikachalam, K. Jayamoorthy, **M. Venkatesh Perumal**, A physicochemical study of excited state intramolecular proton transfer process: Luminescent chemosensor by spectroscopic investigation supported by ab initio calculations, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 79, 2011, 6-16. (IF: 3.232)
39. J. Jayabharathi, V. Thanikachalam, **M. Venkatesh Perumal**, K. Saravanan, Displacement Reaction Using Ibuprofen in a Mixture of Bioactive Imidazole Derivative and Bovine Serum Albumin - A Fluorescence Quenching Study, *Journal of Fluorescence*, Vol. 21, 2011, 1825-1830. (IF: 2.093)
40. J. Jayabharathi, V. Thanikachalam, N. Srinivasan, **M. Venkatesh Perumal**, Evidence for Strong Mixing Between the LC and MLCT Excited States in Some Heteroleptic Iridium (III) Complexes, *Journal of Fluorescence*, Vol. 21, 2011, 1585-1597. (IF: 2.093)

41. S. Rosepriya, **M. Venkatesh Perumal**, A. Thiruvalluvar, J. Jayabharathi, R. J. Butcher, J.P. Jasinski, J.A. Golen, 2-(4-Fluorophenyl)-1-phenyl-1Himidazo[4,5-f][1,10]phenanthro- line monohydrate, Acta Cryst. E67, 2011, o1965. (IF: 0.347)
42. S. Rosepriya, A. Thiruvalluvar, J. Jayabharathi, **M. Venkatesh Perumal**, R.J.Butcher, J.P. Jasinski, J.A. Golen, 1,2-Diphenyl-1H-imidazo[4,5-f][1,10]phenanthro- line, Acta Cryst. E67, 2011, o989. (IF: 0.347 as on 2011)
43. J. Jayabharathi, V. Thanikachalam, N. Srinivasan, K. Jayamorthy, **M. Venkatesh Perumal**, An Intramolecular Charge Transfer Fluorescent Probe: Synthesis, Structure and Selective Fluorescent Sensing of Cu⁺², Journal of Fluorescence, Vol. 21, 2011, 1813-1823. (IF: 2.093)
44. J. Jayabharathi, V. Thanikachalam, N. Vijayan, N. Srinivasan, **M. Venkatesh Perumal**, Optical Properties of Organic Nonlinear Optical Crystal - A Combined Experimental and Theoretical Study, Structural Chemistry Communications, Vol. 1, 2010, 46-52. (IF: Nil)

<i>Citation indices</i>	<i>All</i>	<i>Since 2021</i>
Citations	891	296
h-index	17	10
i10-index	28	10

4.2 CONFERENCE PUBLICATIONS

1. G.Kanthimathi, **M.Venkatesh Perumal**, presented a paper entitled “Biogenic Eu₂O₃ Nanostructures as Dual-Color (Green-Red) Luminescent Probes for Bioimaging” in the International Conference on Smart Materials (ICSM-2026), organized by Department of Physics, Fatima College (Autonomous), Madurai on 25 February 2026.
2. **M. Venkatesh Perumal**, S.Anto Sherlina, R. Harshani, V. Ragavan and A. Manicka Mamallan presented a paper entitled –Study and Evaluation of Firecracker-Related Soil Contamination in Selected Areas Around Sivakasi|| in the 1st International Conference On Sustainable Technology in Civil Engineering and Applied Sciences-2023 (ICSTCA-23) during 24-25th March, 2023 organized by the Departments of Civil Engineering and Basic Science.
3. **Dr.M.Venkatesh Perumal**, Mr.A.Manickka Mamallan, Mr.V.Ragavan presented a paper entitled “Determination and Eco Friendly Suppression of Fluoride Contamination in Ground Water Samples Using Activated Carbon Constituents Of Carica Papaya - A Natural Adsorbent” in 2023 International Conference on Advanced Technologies in Chemical, Construction and Mechanical Sciences (**ICATCHCOME 2023**) organized by KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India during February 9-10, 2023.
4. **Dr.M.Venkatesh Perumal**, Dr.K.Ragavan, Ms. I.Harinidurga, Ms. T. Kiruthika presented a paper entitled –Synthesis and Low-Temperature Sintering of Copper Nanoparticle Pastes for Microelectronic Packaging|| in ISTE Sponsored National Level Conference On Emerging Trends In Engineering Design & Manufacturing (ETEDM -

22), organized by Hindustan Institute of Technology, Coimbatore on 15th & 16th June 2022.

5. Dr.G.Kanthimathi and **M.Venkatesh Perumal** presented a paper entitled|| Green Synthesis of Metals and their Oxide Nanoparticles-Sol Gel Method|| on National Virtual Conference on Sustainable Chemistry and Renewable Energy (SCFRE -2022) organized by Universal Intellectuals Trust (UIT)Villupuram, Tamil Nadu, India on 27 Feb 2022. (ISBN Number in Process).
6. **M.Venkatesh Perumal**, K.Karpagavel, "Synthesis, Characterization, single crystal XRD analysis and computational studies of a versatile π -conjugated benzimidazole derivative with optical applications", A Two-day –National Conference on Materials for Sustainable Development (NCMSD 2019)|| Organized by Department of Library, Ramco Institute of Technology, Rajapalayam, during 11th – 12th January 2019.
7. T. ArunPriyan^a, S. Gnanaraja^a, S. Gopal Raja^a, S. Ganesh^a, **M. Venkatesh Perumal**^{a*}, Determination and Eco-friendly Suppression of Fluoride Contamination in Ground Water Samples Using Activated Carbon Constituents of *Carica Papaya* – A Natural Adsorbent, International Conference on Desalination (InDA2018), Organized by National Institute of Technology, Tiruchirappalli and Indian Desalination Association, during 20th – 21st April 2018.
8. E. Sathiyaraj, **M. Venkatesh Perumal**, M. Logesh, E. R.Nagarajan, C. Ramalingan, –Functionalized Zinc(II) dithiocarbamate complexes: Synthesis, spectral and molecular structures of bis(N-cyclopropyl-N-4-methoxybenzylidithiocarbamate-S,S')Zinc(II) and (2,2'-bipyridine)bis(N-cyclopropyl-N-4-methoxybenzylidithiocarbamate-S,S')Zinc(II)||, National Conference on Advances in Functional Materials (NCAFM 2017), Organized by Department of Chemistry, St. Joseph's College of Engineering, Chennai, On 05th August, 2017.
9. I. Manikandan and **M. Venkatesh Perumal**, –Synthesis, Characterization, Photo physical and Density Functional Theory Studies of Two Novel Benzimidazole Derivatives||, Fifth National Conference on Advanced Functional Materials and Applications (NCAFMA-2017), Organized by Department of Chemistry, Kalasalingam University, Krishnankoil, during 30th – 31st March 2017.
10. B. Palanisamy, T.Usharani and **M. Venkatesh Perumal**, Photocatalytic Degradation of Alachlor Using Mixed Metal Oxide Nanocomposite Under Visible Light, –Workshop cum Nineteenth National Symposium on Environment|| Organized by School of Environmental Sciences, Mahatma Gandhi University, Kottayam, Kerala, during 11th - 13th December 2014.
11. **M.Venkatesh Perumal**, –Innovative Green Technologies for Geologic Sequestration of Carbon Dioxide (CO₂) and to protect Atmosphere|| a two day National Seminar

Organized by Erode Sengunthar Engineering College, Thudupathi, Erode, during 07th - 08th January 2014.

12. J. Jayabharathi and **M. Venkatesh Perumal**, Mechanistic Investigation On Binding Interaction Of Bioactive Imidazole With Protein Bovine Serum Albumin – A Biophysical Study, National Conference on Novel Synthetic and Computational Strategies in Chemical Sciences, SCCS-2011, Organized by Department of Chemistry, Annamalai University, Chidambaram, during 28th – 29th March 2011.
13. J. Jayabharathi and **M. Venkatesh Perumal**, Fluorescence Resonance Energy Transfer From 2-(1-phenyl-1h-Imidazo[4,5-F][1,10]phenanthrolin-2-yl)phenol to a Bioactive Indoloquinoline System, National seminar on Chemistry of Nanomaterials and Molecular Dynamics, Department of Chemistry, Annamalai University, during 30th – 31st December 2010.
14. J. Jayabharathi, K. Jayamoorthy and **M. Venkatesh Perumal**, Synthesis and Spectroscopic Characterization of Luminescent Chemisensor- A DFT based ESIPT process, International Conference on Recent Frontiers in Applied Spectroscopy, Organized by Department of Physics, Annamalai University, Chidambaram, during 22nd-24th September 2010.
15. J. Jayabharathi, K. Saravanan, **M. Venkatesh Perumal** and K. Jayamoorthy, Synthesis and Spectral Studies of Some Fluorescent Materials, National Seminar on Frontiers in Chemistry (NSNFC-2010), Department of Chemistry, Annamalai University, during 15th-16th March 2010.

4.3 BOOK / BOOK CHAPTER PUBLICATIONS

1. Dr.G.Kanthimathi, **Dr.M.Venkatesh Perumal** and Dr.O.Senthilkumar, published a book chapter entitled –*Drinking Water Contaminants and Health Implications*||, in the Book -Science of Environment||, Scieng Publications (Accepted on 07 Jan 2022).
2. O. Senthilkumar, G.Kanthimathi, N. Revathi, **M. Venkatesh Perumal** and K. Leeladevi, Engineering Chemistry, 2024 Edition, Pearson.

4.4 PATENTS PUBLISHED/ GRANTED: Nil

5. LIST OF WORKSHOP / FDP /STTP ATTENDED

1. Dr.M.Venkatesh Perumal, Six Days FDP on –UHV-II: Universal Human Values – Understanding Harmony and Ethical Human Conduct|| organized by AICTE from 15.04.2024 to 20.04.2024.
2. Dr.M.Venkatesh Perumal, Five Days FDP on –Recent Trends of Advanced Functional Materials|| Organized by Department of Physics, Velammal College Of Engineering and Technology (Autonomous) Madurai during 25.03.2024-28.03.2024 , 01.04.2024.

3. Dr.M.Venkatesh Perumal, Eight days Online FDP on "Research Methodology and Pedagogy of Writing, Project Funding" organized by Department of Science and Humanities, N.H.Patel College of Education, Gujarat, during 29.01.2024 to 06.02.2024.
4. Dr.M.Venkatesh Perumal, –A Five-Day Online FDP on Energy Materials for a Sustainable Environment|| organized by Chemistry Division School of Advanced Sciences VIT, Chennai Campus Chennai from 19.06.2023 to 23.06.2023.
5. Dr.M.Venkatesh Perumal, One week FDP on UGC-AICTE Incorporating Universal Human Values in Education(A Joint Initiative of UGC and AICTE) from 19.09.2022 to 23.09.2022.
6. Dr.M. Venkatesh Perumal, Faculty Development Programme On –Emerging Trends in Applied Chemistry|| organized by Department of Chemistry, Easwari Engineering College, Chennai from 25 July to 30 July 2022.
7. Dr.M.Venkatesh Perumal, Online Faculty Development Programme on –All About Nano and Its Applications- Focusing On Energy and HealthCare (AANA 2022)|| Organized by Centre For Nanotechnology Research, Vellore Institute of Technology, Vellore from 22 June to 24 June 2022.
8. Dr.M.Venkatesh Perumal, –International One Week Faculty Development on Research Methodology|| organized by Department of Chemistry ,Kamla Nehru Mahavidyalaya, Nagpur from 02 May to 07 May 2022.
9. Dr.M.Venkatesh Perumal, Online ATAL Faculty Development training programme on "**Electroanalytical Techniques for Bio - Sensing Applications**" organised by CSIR-CECRI, Karikudi, Tamil Nadu, India from 22 Nov to 26 Nov 2021.
10. Dr.M.Venkatesh Perumal, One week International faculty development programme on "**Current Technology in Chemistry**" organized by the Department of Chemistry, Easwari Engineering College, Chennai from 23rd August 2021 to 27th August 2021.
11. **M.Venkatesh Perumal**, Three Day Faculty Development Training Programme on –Team Building|| in Association with –ICT Academy of Tamilnadu||, Organized by Ramco Institute of Technology, Rajapalayam, during 18 – 20 November 2019.
12. **M.Venkatesh Perumal**, A One-day workshop on "*Recent Trends in Green Chemistry*", Organized by Department of Chemistry, Ramco Institute of Technology, Rajapalayam, during 11th August 2018.
13. **M.Venkatesh Perumal**, A Two-day workshop on "*Writing Research Papers, Citation Analysis, Plagiarism, Getting Patent & Copyright*", Organized by Department of Library, Ramco Institute of Technology, Rajapalayam, during 29th – 30th June 2018.

14. **M.Venkatesh Perumal**, Three Days Training Programme on –*Art of Counselling*||, Organized by Department of EEE, Ramco Institute of Technology, Rajapalayam, during 19th – 21st June 2018.
15. **M.Venkatesh Perumal**, QIP Short Term Course on –*Powder X-Ray Diffraction Theory, Practical and Applications*||, Organized by Centre for Continuing Education, Indian Institute of Science (IISc), Bengaluru, during 14th -18th May 2018.
16. **M.Venkatesh Perumal**, Two days Workshop on –*Innovative Teaching Learning Methods Workshop*||, Organized by PACR Polytechnic College, Rajapalayam, on Feb. 2018.
17. **M.Venkatesh Perumal**, One day Workshop and Orientation Programme on SAR preparation for NBA Accreditation, Organized by PACR Polytechnic College, Rajapalayam, on Dec. 2017.
18. **M. Venkatesh Perumal**, Workshop on –*Disaster Management and First Aid*|| Organized by the Department of Civil Engineering, Bannari Amman Institute of Technology, Sathyamangalam, on March 13, 2017.
19. **M.Venkatesh Perumal**, Two-day Academics Workshop on –*Frontiers in Corrosion Engineering and Technology*|| Organized at Bannari Amman Institute of Technology, Sathyamangalam, during 12 & 13th February 2016.
20. **M.Venkatesh Perumal**, –*Faculty Development Programme in Chemistry*|| Organized by the Department of Physical Sciences, Bannari Amman Institute of Technology, Sathyamangalam, Erode, during 16 & 17th July 2015.
21. **M. Venkatesh Perumal**, Two Weeks National Level ISTE-STTP programme on –*Environmental Science*|| Organized by IIT-Bombay, during 02nd - 12th June 2015.
22. **M. Venkatesh Perumal**, Workshop on –*Advanced Instrumental Methods for Engineering Materials (AIMEM)*|| Organized by the Department of Physical Sciences, Bannari Amman Institute of Technology, Sathyamangalam, during 18th – 19th October 2014.
23. **M.Venkatesh Perumal**, –*PEP Workshop*|| organized by Bannari Amman Institute of Technology, Sathyamangalam, during 6th - 7th July 2013.

6. EVENTS ORGANIZED

1. 1st International Conference On Sustainable Technology in Civil Engineering and Applied Sciences-2023 (ICSTCA-23) during 24-25th March, 2023 organized by the Departments of Civil Engineering and Basic Science (Organizing Secretary).

2. A National level conference on "Materials for Sustainable development (NCMSD 2019)" during 11-12 January 2019, jointly organized by the Department of Chemistry and Physics (Sponsored by ISTE and RIT) as an Organizing Team.
3. Five days –**INSPIRE SCIENCE CAMP**|| sponsored by Department of Science and Technology & Organized by Department of Physical Science, Bannari Amman Institute of Technology, Sathyamangalam, during 23-27th February 2016.
4. One day Workshop on –**Recent Trends in Green Chemistry**||, Department of Chemistry, Ramco Institute of Technology on 11.08.2018.

7. AWARDS & ACHIEVEMENTS

1. Conferred as a –Visiting Faculty Fellow|| – Jawaharlal Nehru Centre for Advanced Scientific Research, JNCASR, Bangalore for the academic year 2016-2017 for a period of three months.
2. Received –Certificate of Merit|| for secured 2nd place in B.Sc., Degree examinations in 2004.
3. Received a cash amount of Rs.3000/- as Dr.V.V.Ramanujam Memorial Prize for secured the first place in –Inorganic chemistry|| theory exams (in M.Sc.) held in Annamalai University.
4. Received a sum of Rs.2000/- as research fellowship per month for one year during Ph.D. programme from Annamalai University.
5. Four of My Project Students got First Prize with Certificate of Appreciation and a Cash Prize of Rs.7000 in the National Science Day Exhibition, held at Ramco Institute of Technology, Rajapalayam, on Feb. 2018.
6. Received –Certificate of Appreciation|| from Ramco Institute of Technology for achieving 100% result for the subject - CY8151-Engineering Chemistry in Anna University Examination 2017-2018 (Odd Sem).
7. Received –Certificate of Appreciation|| from Ramco Institute of Technology for achieving 100% result for the subject - CY8151 – Engineering Chemistry in Anna University Examination 2017-2018 (Even Sem), 2018-2019 (Odd Sem), 2019-2020 (Odd Sem).
8. Produced 100% result in GE8291 – Environmental Science and Engineering in Anna University Examination 2018-2019 (Even Sem.) for B.E. Civil Engineering & B.E. EEE.

8. ONLINE COURSES

Sl.No.	Year	Semester	Course Name	University
1.	2017-2018	ODD	Introduction to Chemistry: Structures and Solutions	Duke University
2.		EVEN	Environmental Protection and Sustainability	Ben-Gurion University of the Negev
3.	2018-2019	ODD	Introduction to Chemistry: Reactions and Ratios	Duke University
4.		EVEN	Structure of Materials: Part I	Massachusetts Institute of Technology
5.	2019-2020	ODD	Nanotechnology: A Maker's Course	Duke University, North Carolina State University
6.		EVEN	Introduction to Sustainability	University of Illinois at Urbana-Champaign
7.	2020-2021	ODD	Nano Technology and NanoSensors Part - 1	Israel Institute of Technology, Israel
8.			Nano Technology and NanoSensors Part - 2	Israel Institute of Technology, Israel
9.			Structure of Materials	MIT, USA
10.			From Fossil Resources to Biomass: A Chemistry Perspective	Wageningen University, Netherlands
11.			Drinking Water Treatment	Delft University of Technology
12.			The Health Effects of Climate Change	Harvard University
13.	2021-2022	ODD	Renewable Energy: Fundamentals and Job Opportunities	University at Buffalo
14.		EVEN	Environmental Hazards and Global Public Health	University of Michigan
15.	2022-2023	ODD	Our Energy Future	University of California San Diego
16.		EVEN	Matrix Algebra for Engineers	The Hong Kong University of Science and Technology
17.		ODD	Lithium Based Batteries	Arizona State University

18.	2023-2024	EVEN	Introduction to Linear Algebra	The University of Sydney
19.	2024-2025	ODD	Introduction to Materials Science	Arizona State University
20		EVEN	Basic Mathematics	Birla Institute of Technology, Pilani
21.	2025-2026	ODD	Crystal Structures and Properties of Metals	Arizona State University

9. List of proposals submitted to various funding agencies like CSIR, DST, DST-SERB, DRDO, TNSCST etc., as PI/Co-PI

S.No.	Name of the PI	Title & Funding Agency	Applied On	Proposed Budget
1.	Dr.M.Venkatesh Perumal (Principal Investigator) Asst. Prof. / Chemistry, RIT, Rajapalayam	Title: Highly Efficient Phosphorescent Iridium(III) Complexes Containing Acenaphthimidazole Ligands For Organic Light-Emitting Devices (OLEDs) Agency: Council of Scientific & Industrial Research (CSIR)	24.07.2017	Rs.19,59,000/- (Selected for Round 1; Not sanctioned)
2.	Dr.M.Venkatesh Perumal (Principal Investigator) Asst. Prof. /Chemistry, RIT, Rajapalayam	Title: Heteroleptic Iridium(III) Complexes for Highly Efficient Phosphorescent Organic Light-Emitting Devices. Agency: Science and Engineering Research Board (SERB)	01.08.2017	Rs.15,63,474/-
3.	Dr.M.Venkatesh Perumal (Principal Investigator) Asst. Prof. /Chemistry, RIT, Rajapalayam	Title: Determination and Eco-friendly Suppression of Fluoride Contamination in Ground Water Samples, in and around the Villages of Rajapalayam Taluk of Virudhunagar District, Using Activated Carbon Constituents of <i>Carica Papaya</i> – A Natural Adsorbent. Agency: Tamilnadu State Council for Science and Technology	28.08.2017	Rs.10,000/- (Sanctioned during Jan. 2018)
4.	Dr.M.Venkatesh Perumal (Principal Investigator) Asst. Prof. /Chemistry, RIT, Rajapalayam	Title: Assessment of Soil and Water Quality in Selected Areas of Sivakasi Taluk of Virudhunagar District to Study the Effect of Contamination of Firecrackers Agency: Tamilnadu State Council for Science and Technology	24.08.2018	Rs.10,000/-

5.	Dr.M.Venkatesh Perumal Asst. Prof. /Chemistry, RIT, Rajapalayam	Title: Synthesis, Characterization and Adsorption Studies of Activated Charcoal Prepared Using Naturally Available Low Cost Materials. Scheme: Indo-Japanese Joint Project on –Establishment of Young Researcher Fellowship Programme 2018-2019 Agency: Department of Science & Technology & Indian National Science Academy New Delhi	14.09.2018	-
6.	Dr.M.Venkatesh Perumal (Principal Investigator) Asst. Prof. /Chemistry, RIT, Rajapalayam	Title: Determination and Eco-friendly Suppression of Heavy Metal Contamination in Effluents from Tannery and Dyeing Industries using Activated Carbon Constituents of Neem Oil Cake – A Natural Adsorbent. Agency: Tamilnadu State Council for Science and Technology (TNSCST)	22.08.2019	Rs.10,000/-
7.	Dr.M.Venkatesh Perumal (Principal Investigator) Asst. Prof. /Chemistry, RIT, Rajapalayam	Title: Cost Effective Natural Adsorbents From Indian Herbal Species For Water Treatment Agency: Tamilnadu State Council for Science and Technology (TNSCST)	17.03.2020	Rs.3,70,000/-
8.	Dr.M.Venkatesh Perumal (Co-Investigator) Asst. Prof. /Chemistry, RIT, Rajapalayam	Title: Embedded Based Industrial Effluent Treatment Using Biosynthesized Nano-adsorbent. Agency: Department of Science and Technology (DST) Under Waste Management Technologies Scheme	30.08.2020	Rs.24,88,572/-
9.	Dr.M.Venkatesh Perumal (Principal Investigator) Asst. Prof. /Chemistry, RIT, Rajapalayam	Title: Design and Synthesis of Rapid Accessible Turn-On Organic Fluorescent Chemosensors. Agency: CSR Project Proposal at UGC-DAE Consortium for Scientific Research	12.08.2021	Quoted Consumables: 50,000 per Year Contingency: 15,000 per year

10.	Dr.M.Venkatesh Perumal (Principal Investigator) Asst. Prof. /Chemistry, RIT, Rajapalayam	Title: Design and Synthesis of Iridium(III) Complexes for Highly Efficient Phosphorescent OLEDs Agency: DST (SUBRA-2021)	10.05.2022	Rs. 26,79,600/-
11.	Dr.M.Venkatesh Perumal, Associate Professor (Principal Investigator) and Dr.G.Kanthimathi, Professor (Co-PI)	Title: "Green Synthesis of Rare Earth Element-Based Nanomaterials Using Phyto-Extracts for Sustainable Advanced Applications" (ANRF/ARG/2025/006758/CS). Agency: Anusandhan National Research Foundation (ANRF)	15.07.2025	Rs.25,47,200/-
12.	Dr.M.Venkatesh Perumal, Associate Professor/ Chemistry	"Next-Gen Rare Earth Nano-Photocatalysts for Clean Water" under TNSCST (SPS 2025)	22.08.2025	Rs.10,000