# **Curriculum Vitae**

### Dr. S. ELANGOVAN, M.Sc., M.Phil., Ph.D (Physics)

#### Specialized in Condensed State of matter and Material Science

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Scopus ID:57226718054

**Objectives:** Career growth in the teaching profession with academic excellence and pursuit of further qualification and research.

### **Educational Qualification:**

S.No	Degree	Institution	Year of Passing	Mark Percentage
1	Ph.D. (Physics)	Bharathiar University Coimbatore	Oct 2014	-
2	M.Phil (Physics)	Annamalai University Chidambaram	Jan 2004	76
3	M.Sc (Physics)	Annamalai University Chidambaram	May 2002	71
4	B.Sc (Physics)	Poompuhar College Melaiyur.	May 2000	74

➤ 2008-2014: **Doctor of Philosophy** Bharathiar University, Coimbatore

Specialization: Condensed State of matter / Material Science

Title: Ultrasonic studies on some alkyl formates with primary alcohols at various temperatures

Guide: Dr. S. Mullainathan, A.V.C College of Engineering, Mayiladuthurai, Tamilnadu, India

➤ 2002-2004: **Master of Philosophy**, Annamalai University, Chidambaram

Specialization: Spectroscopy

Title: FTIR studies on Methylmethacrylate with primary alcohols

Guide: Prof. Dr. P. Sivagurunathan, Annamalai University, Chidambaram

Overall Mark Percentage: 76% (I class).

➤ 2000-2002: **Master of Science,** Annamalai University, Chidambaram

Overall Mark Percentage: 71% (I class).



> 1997-2000: Bachelor of Science at Poompuhar College, Melaiyur. Affiliated to Bharathidasan University, Tiruchirappalli *Overall Mark Percentage: 74% (I class)*.

### **Working Experience:**

S.No	Posting	Institution	Duration	Experience in years
1	Associate Professor	Wollega University, Ethiopia	2017-Till date	5
2	Assistant Professor	Easwari Engineering College, Ramapuram Chennai – 600 089	2010 - 2017	8
3	Lecturer	Jaya Engineering College Thiruninravur, Avadi, Chennai- 602 024	2007-2010	3
4	Lecturer	Thiruvalluvar College of Engineering and Technology, Vandavasi	2006-2007	1

#### Total Years of Teaching Experience:

> 25.10.2017 - Present ( 5 years ): Wollega University, Nekemte, East Wollega, Ethiopia

Designation: Associate Professor

Member of the Curriculum designing committee

Prepared the lab manual for the Heat and Thermodynamics Laboratory

> 01.12.2010 to 09.10.2017 (6 years 10 Months): Easwari Engineering College, Ramapuram,

#### Chennai, Tamil Nadu, India

Designation : Assistant Professor

> 09.09.2010 to 30.11.2010 (2 Months 21 Days) Easwari Engineering College, Ramapuram, Chennai,

## Tamil Nadu, India

Designation : Lecturer

- Served as a Class Counselor
- Served as Youth Red Cross Programme Officer

### Convener for the National Conferences

- ✓ Department of Science and Technology Science and Engineering Research Board (DST-SERB) sponsored "2<sup>nd</sup> National Conference on Materials for Modern World" (NCMMW 2015). Organized on Sep 28-29, 2015.
- ✓ Department of Atomic Energy- Board of Research in Nuclear Sciences (DAE-BRNS) sponsored "3<sup>rd</sup> National Conference on Materials for Modern World" (NCMMW -2016). Organized on Sep 15-16, 2016.
- Faculty-In-Charge, Department improvement (Kaizen)

- Served as Anna University Representative for conducting Examinations
- > 03.08.2007 to 07.09.2010(3 years 1 Month): Jaya Engineering College, Thiruninravur, Avadi,

# Chennai, Tamil Nadu, India

Designation : Lecturer

- Served as Class Counselor
- Served as National Service Scheme Programme Officer
- Served as Citizen Consumer Club Programme Officer
- > 02.05.2006 to 02.08.2007 (1 year 3 Months): Thiruvalluvar College of Engineering and Technology,

## Vandavasi, Tamil Nadu, India

Designation : Lecturer

Class Counselor and Assistant Coordinator Exam Cell

## > Subjects handled

- Heat and Thermodynamics
- Mechanics
- Wave and Optics
- Classical Mechanics
- Sustainable Sources of Energy
- Environmental Science and Engineering
- ❖ Engineering Physics I & II
- Heat and Thermodynamics Laboratory
- Engineering Physics Lab

#### Research:

S.No	Description	Numbers
1.	Journal publications in various indexed journals	34
2.	Scopus/SCI/Web of Science indexed Journals	17
3.	Research Projects completed	03
4.	SERB, BRNS sponsored conferences organized as convenor	02
5	Patent published	01

### **Publications status:**

❖ Total number of papers published in Journals : 34

❖ Scopus,SCI : 17

❖ Citations : 84

♦ h – Index
: 05

❖ i10- Index : 03

(https://scholar.google.co.in/citations?hl=en&user=h3kqx4EAAAAJ&view\_op=list\_works&sortby=pubdate)
List of Publications:

- 1. Sampandam Elangovan "Thermophysical Studies of Chlorpheniramine with 1-Propanol at 303 K, 308 K, and 313 K in the Atmospheric Pressure." Journal of Chemistry, Article ID 5333930, 2022, https://doi.org/10.1155/2022/5333930. (Scopus, SCIE, Web of Science).
- S Elangovan, L Kebede, EK Senbeto "Intermolecular Interactions between Chlorpheniramine with 1-Butanol, 1-Pentanol, and 1-Hexanol," *Russian Journal of Physical Chemistry A*,96,S1-S7 (2022). https://doi.org/10.1134/S0036024422140084 Springer Nature (Scopus, SCI, Web of Science etc).
- 3. Kebede Legesse, Vijaya Bhaskar Rao Poluri, **Elangovan Sampandam**, "Electric Modulus Analysis of (1 x) PbMg1/3Nb2/3O3-(x)K1/2Bi1/2TiO3 Ceramics" **Advances in Condensed Matter Physics**, Article ID 2450578 ,2022, https://doi.org/10.1155/2022/2450578
- 4. N Kangathara, V Sabari, L Saravanan, S Elangovan\*," Synthesis, Characterization, and Comparison of Pure Zinc Oxide and Magnesium-Doped Zinc Oxide Nanoparticles and their Application on Ethanol Sensing Activities." Journal of Nanomaterials, Article ID 1769278, 2022, https://doi.org/10.1155/2022/1769278.
- 5. N Kanagathara, S Sankar, L Saravanan, V Natarajan, S Elangovan\*, Dielectric and Impedance Spectroscopic Investigation of (3-Nitrophenol) -2,4,6-Triamino-1,3,5- Triazine: An Organic Crystalline Material." Advances in Condensed Matter Physics, Article ID 6002025, 2022, https://doi.org/10.1155/2022/6002025.
- 6. N Kanagathara, VJ Thanigaiarasu, V Sabari, S Elangovan, "Density Functional Theoretical Computational Studies on 3-Methyl 2-Vinyl Pyridinium Phosphate" Advances in Condensed Matter Physics, Article ID 6488234,2022, https://doi.org/10.1155/2022/6488234
- 7. S Elangovan, N Kanagathara "FT-IR, FT-NMR and SHG studies on melaminiumacetate monohydrate-an organic crystalline salt" AIP Conference Proceedings, 2464, 030003 (2022); https://doi.org/10.1063/5.0082520
- 8. N Kanagathara, K Senthilkumar, V Sabari, V Ragavendran, **S Elangovan**, "Structural and Vibrational Investigation of Benzil-(1, 2-Diphenylethane-1, 2-Dione): Experimental and

- Theoretical Studies." **Journal of Chemistry**, Article ID 5968496, 2022 https://doi.org/10.1155/2022/5968496.
- 9. Sampandam Elangovan, Tilahun Diriba Garbi, Ponnusamy Thillaiarasu. Study on Intermolecular Interaction between Chlorpheniramine and 1-Ethanol at Various Temperatures, Recent Trends in Chemical and Material Sciences 2, 1-9 ,2021 https://doi.org/10.9734/bpi/rtcams/v2/10849D
- 10. Kidanu Begna, Sampandam Elangovan and Nemomsa Anbese, "Prevalence of Haemonchosis in Sheep Slaughtered at Shambu Municipal Abattoir, Oromia, Ethiopia" Applied Zoology, 161 (1) 55853-55856,2021
- 11. **Elangovan Sampandam**, Tilahun Diriba Garbi, Yilak Alemu Abbo "Intermolecular interaction studies of brompheniramine with 1-propanol at 303 K, 308 K and 313 K" **Chemistry Africa**, 3, 1101–1107 (2020). https://doi.org/10.1007/s42250-020-00155-2
- 12. Sampandam Elangovan , Tilahun Diriba Garbi , Kerbed Legesse Kebeta and Boka Kumsa, "Mathematical Analysis of Intermolecular Interaction Studies Between Brompheniramine and 1-Hexanol at Various Temperatures Using Ultrasonic Velocity" Elixir Condensed Matter Physics, 142 , 54336-54339, 2020.
- 13. Sampandam Elangovan, Tilahun Diriba Garbi, Senbeto Kena Etana, "Dielectric Relaxation Studies Between Brompheniramine with 1-Butanol, 1-Pentanol and 1-Hexanol at 303K" Material Science Research India, 3, 230-235, 2020. http://dx.doi.org/10.13005/msri/170305
- 14. Ponnusamy Thillai Arasu, Panneer Selvam Seenidurai, Arumugam Murugan, Sampandam Elangovan, "Functional Modification of Borassus flabellifer Sheath Fibres Using Isocyanate" Letters in Applied NanoBioScience,10(1),1889-1895,2021. https://nanobioletters.com/wp-content/uploads/2020/10/22846808101.18891895.pdf
- 15. **Sampandam Elangovan**, Tilahun Diriba Garbi, Ponnusamy Thillaiarasu,"Intermolecular Interaction between Chlorpheniramine and1-Ethanol at various Temperatures" **Material Science Research India**, 17(2),162-169,2020. http://dx.doi.org/10.13005/msri/170208
- 16. Sampandam Elangovan, Tilahun Diriba Garbi, Yilak Alemu Abbo, "Intermolecular Interaction Studies of Chlorpheniramine with 1-methanol at 303K" International Journal of Research in Engineering, Science and Management, 3(4), 400-402,2020.
- 17. **Sampandam Elangovan\***, Abraham Abebe Kibret, Tilahun Diriba Garbi and Dereje Wakgari Amente," Intermolecular Interactions of Chlorpheniramine with 1-Methanol at 303K, 308K and 313K using Time Domain Reflectometry"**Elixir Condensed Matter Physics**, 128,52791-52793, 2019.

- 18. **Sampandam Elangovan\***, Dereje Wakgari Amente and Abraham Abebe Kibret, "Dielectric relaxation studies of brompheniramine with 1-methanol, 1-ethanol and 1-propanol at 303K"**Elixir Ultrasonics** 118, 50931-50932,2018.
- 19. Sampandam Elangovan , Abraham Abebe Kibret , Tilahun Diriba Garbi , Dereje Wakgari Amente, "Physico Chemical Properties of Brompheniramine with 1-Methanol at 303K" International Journal of Research in Engineering, Science and Management,1(12),607-609,2018.
- Sampandam Elangovan, Kumera Assefa and Yilak Alemu Abbo "Intermolecular interactions of Brompheniramine with 1-pentanol at various temperatures." Elixir Ultrasonics 115, 49704(2018).
- 21. **Sampandam Elangovan** and Yilak Alemu Abbo "Intermolecular Interaction Studies of Binary Liquid Mixtures Using Time Domain Reflectometry at 303K" **International Journal of Chem Tech Research**,11(2),196-199,2018 http://dx.doi.org/10.20902/IJCTR.2018.110224
- 22. **Sampandam Elangovan**, Dereje Wakgari Amente "Intermolecular Interaction of Methyl Formate with 1-butanol, 1-pentanol and 1-hexanol at 303K" **Material Science Research India,**14,212,2017. http://dx.doi.org/10.13005/msri/140220
- 23. **S. Elangovan**, "Molecular Interaction Studies of Methyl Formate with Primary Alcohols at 303K Using Time Domain Reflectometry" **International Journal of ChemTech Research**, 10(6),640-643,2017.
- 24. **S. Elangovan** and S. Mullainathan "Ultrasonic studies on intermolecular interaction between n-methyl formate with 1-butanol, 1-pentanol and 1-hexanol at 303K." *Russian Journal of Physical Chemistry A.* 90, 1006 (2016). DOI: 10.1134/S0036024416050125
- 25. **S. Elangovan** "Ultrasonic studies on intermolecular interaction in binary mixture of n-methyl formate with 1-butanol at 308K". *International Journal of Chem Tech Research.* 8,223 (2015) http://sphinxsai.com/2015/ch\_vol8\_no1/4/(223-227)%20V8N1.pdf
- 26. **S. Elangovan** and S. Mullainathan "Ultrasonic Studies in Binary Mixtures of n-Propyl formate with 1-alcohols at 303K" *Asian Journal of Chemistry.* 27(7), 2508 (2015). http://dx.doi.org/10.14233/ajchem.2015.17957
- 27. S. Elangovan and S. Mullainathan "Intermolecular Interactions in Mixtures of n-ethyl Formate with 1-methanol, 1-ethanol and 1- propanol on Density, Viscosity and Ultrasonic Data" Russian Journal of Physical Chemistry A. 88, 2108 (2014).DOI:10.1134/S0036024414120061
- 28. **S. Elangovan** and S. Mullainathan "Ultrasonic studies in binary mixture of n-methyl formate with 1-ethanol at various temperatures". *Russian Journal of Physical Chemistry A.* 88,601(2014). DOI: 10.1134/S0036024414040086

- S. Elangovan and S. Mullainathan "Intermolecular interaction studies in binary mixtures of nmethyl formate with 1-methanol at various temperatures". *Asian Journal of Chemistry*. 26,137 (2014). http://dx.doi.org/10.14233/ajchem.2014.15350
- S. Elangovan and S. Mullainathan "Ultrasonic studies of mixtures of ethyl formate and nalcohols in carbon tetrachloride". *Indian Journal of Physics*. 87, 373 (2013). DOI 10.1007/s12648-012-0230-z
- 31. **S. Elangovan** and S. Mullainathan "Ultrasonic studies of intermolecular interaction in binary mixture of n-methyl formate with 1-propanol at various temperatures". *Indian Journal of Physics.* 87,659 (2013). DOI 10.1007/s12648-013-0288-2
- 32. S Elangovan, S Mullainathan "Ultrasonic studies of brompheniramine with 1-butanol at 303, 308 and 313 K" Elixir Ultrasonics , 58, 15048-15052, 2013.
- 33. **S. Elangovan** and S. Mullainathan "Ultrasonic studies on intermolecular interaction in ternary mixtures of n-ethyl formate+1-propanol+benzene at 303K". *Indian Journal of Physics.* 86, 727 (2012). DOI 10.1007/s12648-012-0132-0
- 34. **S. Elangovan** and S. Mullainathan "Dielectric relaxation studies of ethyl formate with primary alcohols using Time Domain Reflectometry." *Material Science Research India.* 9, 81 (2012). http://materialsciencejournal.org/pdf/vol9no1/MSRIVol09N1P81-83.pdf.

# **Research papers published in Conferences:**

- Intermolecular interaction in binary liquid mixture of chlorpheniramine and 1-ethanol at 308 k by using ultrasonic technique. 3<sup>rd</sup> National Conference on Materials for Modern World (NCMMW-16), held during Sep 15-16, 2016. Department of Physics, Easwari engineering College, Chennai
- Intermolecular interaction studies in binary mixtures of brompheniramine with 1-butanol, 1-pentanol and 1-hexanol at 303K, **S.Elangovan** and S.Mullainathan, 2<sup>nd</sup> National Conference on Materials for Modern World (NCMMW-15), held during Sep 28-29, 2015. Department of Physics, Easwari engineering College, Chennai
- Ultrasonic studies in binary mixtures of chlorpheniramine with 1-alcohols at 303K S.Elangovan and S.Mullainathan, National Conference on Materials for Modern World (NCMMW-14), held during Sep 10-11, 2014. Department of Physics, Easwari engineering College, Chennai.
- ➤ Ultrasonic Studies of Brompheniramine with 1-Butanol at 303,308 and 313K. **S.Elangovan** and S.Mullainathan, International Conference on Biological Inorganic Chemistry (ICBIC 2013), held during Feb 22-23, 2013 Department of Chemistry, Periyar University, Salem.
- > Dielectric Relaxation studies of Ethyl Formate with Primary alcohols using Time Domain Reflectometry. **S.Elangovan** and S.Mullainathan "National Conference on Recent

Advances in Materials and Technology (NCRAMAT)" held during January6-7, 2012, Department of Physics, Sathyabama University, Chennai.

# **RESEARCH PROJECTS:**

S.No	Title of the Project	Funding Agency	Position	Status
1	Mathematical modeling of physicochemical interaction studies among amines and primary alcohols at various temperatures using ultrasonic data.	Wollega University	Principal Investigator	Completed
2	Intermolecular interaction studies among amines with primary alcohols using ultrasonic and dielectric data	Wollega University	Principal Investigator	Completed
3	Tribological Behaviors of Surface Functionalized (Substituted dithiocarbamates) MoS <sub>2</sub> Nanoparticles – A Novel Type of Additives in Lubricating Oil	Wollega University	Co-Investigator	Completed

# **Declaration:**

I hereby declare that all the above information's true and correct to the best of my knowledge and belief.

Yours sincerely

Dr. S.ELANGOVAN