#### **CURRICULUM VITAE**

Dr.V. Thangaraj Assistant Professor (Sl.Gr) Department of Chemistry

UCE - BIT Campus, Tiruchirappalli 620 024

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### > Strengths:

- Ability to work well in a team as well as an individual.
- Excellent interpersonal and communication skills.
- Excellent problem solving skills with ability to operate proactively and manage crisis situations

#### > Research Area:

- Electrodeposition of metals and alloys, anodizing,
- Nanostructured materials, modified electrodes, Nanoparticles, supercapacitors, Electrochemical sensor, biosensor
- Corrosion, Corrosion inhibitor

#### > Educational Qualifications:

Qualification	College/University	Year of completion	Percentage	Class
Ph.D. (Chemistry)	National Institute of Technology Karnataka, Surathkal	2009	-	-
PG (Chemistry)	Gandhigram Rural Institute, Dindigul	2003	70%	First
UG (Chemistry)	SRNM College, Sattur	2001	68.5%	First
PGDCA	Alagappa University, Karaikudi	2002	62.4%	First

**Experience:** (chronological order)

Name of Company / Institutions	Designation of Post	From	То	Experience in Year
UCE-BIT Campus, Anna University, Tiruchirappalli	Assistant Professor	01.10.2009	Till date	14Y
Manipal Institute of Technology- Manipal	Lecturer	20-02-2008	12-08-2009	1.6Y
SRM University, Chennai	Assistant Professor	20-08-2009	30-09-2009	1M 10D
CECRI-Karaikudi	Project Fellow	24.02.2004	23.07.2004	0.5Y
CECRI-Karaikudi	Project Trainee	07.05.2003	31.12.2003	0.8Y

#### > Awards / Honors Received:

- 1. **Best Presentation Award**, International Conference on Functional Materials for Advanced Technology (ICFMAT -2009), Velammal Engineering College, Chennai
- 2. **Summer Research Fellowship**, Indian Academy of Sciences, carried out summer research in IISc, Bangalore, 2009.

#### > Membership of Scientific and Professional Societies:

- 1. Life Member Indian Society of Technical Education (ISTE)
- 2. **Life Fellow Member** Society for Advancement of Electrochemical Science and Technology (SAEST)
- 3. Life Member Indian Society of Electro Analytical Chemistry (ISEAC)

## > Fellowships and Grants received:

> Received 2 research projects from DST- SERB with grants of 35.5 Lakhs

## > Sponsored Research Projects:

S1.No	Name of the project	Funding agency	Project value (Rs.)	Duration	Status
1	Synthesis of Compositionally Modulated Multilayered Alloys by Electrochemical Deposition	SERB	24,50,000	3	Completed
2	Development of nanostructured multilayered solar absorber coatings by electrochemical deposition	SERB	11,00,000	2	Completed

## > Completed PG/UG Projects:

Number of PG Projects Completed: 2 No's

S1. No	Name of the scholar	Title of the thesis	Departmen t of the Student	Date of Submission
1.	A. Ganesh Pandi	Synthesis and Characterization of MgO nanoparticles by Sol-Gel and Hydrothermal methods	Nanoscience	10.06.2014
2.	S. Aravindha Raja	Supercapacitance studies of MnO <sub>3</sub> Nanoparticles by various Wet chemical methods	M.Tech Nanoscience and Technology	10.06.2014

## > Consultancy Activities: Nil

# > Research Guidance (M.S/Ph.D.) (Completed): Ph.D Completed: 06

S1. No	Name of the scholar	Title of the thesis	Year of registration	Date of viva voce
1.	C. Narendhar	Multitargeted Cancer Therapy Using Magnetic Nanoparticulates		17.11.2016
2.	K. Perumal Raj	Synthesis, Characterization, Photocatalytic and Biological Applications of Nickel Oxide Nanoparticles	2011	28.09.2017
3.	P. Siva Karthik	Investigations on Effect of Some Metal Ion Dopants on Structural, Optical and Photocatalytic activity of SNO <sub>3</sub> , WO <sub>3</sub> , ZnO Nanoparticles	2011	09.11.2018
4.	V. Usha	Synthesis, Characterization, Spectral Hammet application and Biological activities of Some Chalcones	2012	12.12.2018
5.	V. Selvaraju	Synthesis and Characterization of Zn-Fe group Metal Alloys by Electrochemical Deposition	2015	29.04.2019
6.	M. Muthupandi	Analysis of Amino Acid Repeats and Stability for Predicting Bipolar-Caused Disorder in Proteins using Machine Learning Techniques with Natural Variants	2016	03.05.2024

#### > Research Guidance (M.S/Ph.D.) (Ongoing): Ph.D ongoing: 04

S1. No	Name of the scholar	Tentative Title of the thesis	Year of registration	Status
1.	A. Sivakumar Ponnambalam	Synthesis of Nanocellulose and its Biophysical applications	2016	Ongoing
2.	S.A.T. Shanmugapriya	Biosynthesis of Nano Particles using Plant Extracts for Antimicrobial and Corrosion Inhibition Study	2021	Ongoing
3.	G. Adaikala Selvan	Production of Biopolymer from Groundnut Shell assisted by Fungal Mycelium for Membrane Synthesis	2023	Ongoing
4.	S. Rachel	Facile Synthesis, Potent Analysis of Ag and MgO Nanoparticles from Marine Seaweed	2023	Ongoing

#### > Publications:

#### a. Books / book chapters:

- 1. **Thangaraj Vairamuthu**, A. Chitharanjan Hegde, Electrodeposition and characterization of some Zn-Fe group metal alloys, LAP Lambert Academic Publishing, ISBN 978-3-8383-7710-0.
- 2. V. Raj and **V. Thangaraj**, Surface technology of Aluminum and its alloys, LAP Lambert Academic Publishing, ISBN 978-3-8433-9181-8.

#### b. Book chapters:

- 1. K Perumalraj, **V Thangaraj**, A P Uthirakumar and P Sivakarthik, Invitro Cytotoxicity Studies Of Nickel Oxide Nanoparticles On Cancer Cells Using MTT Assay, ELSEVIER, ISBN 9789351072935
- 2. V. Usha, G. Thirunarayanan, **V. Thangaraj**, I.Muthuvel and S. Rajalakshmi, Antimicrobial behavior of Substituted Styryl 3-nitro-4-chlorophenyl Ketone, Nova Science Publishers, ISBN: 978-1-68507-008-3.

#### c. Publication in International Journals:

- 1. A. Thulasi, N.Y. Sreedhar, S. Himagirish Kumar, Karumanchi Susmitha, V. Manjunath, N.V. Srihari, D. Sai Vinathi, **V. Thangaraj**, Structural, Morphological and Electrochemical Studies of Synthesized BaCuTiO3 Doped NiTiO3 Nanocomposites for Energy Storage Application, Asian Journal of Chemistry 37(1),2025 155-165. IF: 0.37 DOI: https://doi.org/10.14233/ajchem.2025.32931.
- 2. K Mahalakshmi, RM Jenila, IV Potheher, V Lakshmi, **V Thangaraj**, Bifunctional rGO incorporated NiSe2 nanocomposite as a photocatalyst and an electrode in supercapacitor, Journal of Alloys and Compounds 972, 2024, 172699. IF: 6.2. DOI: <a href="https://doi.org/10.1016/j.jallcom.2023.172699">https://doi.org/10.1016/j.jallcom.2023.172699</a>
- 3. K. Mahalakshmi, R. Mary Jenila, E. Vivek, I. Vetha Potheher, **V. Thangaraj**, Studies on dielectric, thermal and electrochemical characteristics of rGO incorporated CoSe2 nanocomposite for energy storage application, Synthetic metals, 299, 2023, 117450. IF: 4.0. DOI:
- 4. MARIYAPPAN MUTHUPANDI, **VAIRAMUTHU THANGARAJ**, ITSRepeats: Amino Acids Repeats and Composition Differences for Detecting Proteins Causing Bipolar Related Disorder, Revista de Chimie, Volume: 74, Year: 2023, Issue: 1, 28-39, DOI: <a href="https://doi.org/10.37358/RC.23.1.8561">https://doi.org/10.37358/RC.23.1.8561</a>. I.F: 1.75.
- 5. I. Muthuvel, G.Thirunarayanan, **V. Thangaraj**, N. Sundaramurthy, S. Rajalakshmi and V.Usha, Study of catalytic activity of Zn3(PO4)2 on the synthesis of some pyrenyl enones, Materials Today: Proceedings, 43, 2021, 2203-2207. DOI: https://doi.org/10.1016/j.matpr.2020.12.169. IF: 1.24.
- 6. Selvaraju, V and **Thangaraj, V**, "Corrosion properties of mild steel surface modified by bright Zn-Co alloy Electrodeposit from acetate electrolytic bath" Materials Research Express, 6(2), 2019, 026501. DOI: 10.1088/2053-1591/aaea40 IF: 1.449.
- 7. V. Usha, **V. Thangaraj**, G. Thirunarayanan, Synthesis and antimicrobial activity of some 3-Phenanthryl Chalcone, Organic preparations and procedures International, 50(4), 2018, 459-463. DOI: <a href="https://doi.org/10.1080/00304948.2018.1468990">https://doi.org/10.1080/00304948.2018.1468990</a>. IF: 1.520
- 8. Selvaraju, V and **Thangaraj, V** 2018, "Influence of γ-phase on corrosion resistance of Zn-Ni alloy electrodeposition from acetate electrolytic bath", Materials Research Express, 5(5), 2018, 056502. DOI: 10.1088/2053-1591/aabe64 IF: 1.449
- 9. V.Usha, **V.Thangaraj**, Synthesis and Characterisation of Substituted 2-benzofuranyl Chalcones, Materials Today: Proceedings, 5(8), 2018, 16703-16715. DOI: https://doi.org/10.1016/j.matpr.2018.06.034 IF: 1.24

- 10. P Sivakarthik, **V Thangaraj**, M Parthibavarman, A facile and one-pot synthesis of pure and transition metals, journal of materials science: materials in electronics, 28(8), 2017, 5990 -96. DOI: 10.1007/s10854-016-6274-7. IF: 2.019
- 11. P Sivakarthik, **V Thangaraj**, S Kumaresan, K Vallalperuman, Comparative study of co and ni substituted ZnO nanoparticles: synthesis, structural, optical and photocatalytic activity, journal of materials science: materials in electronics, 28(14), 2017, 10582 -88. DOI: 10.1007/s10854-017-6832-7. IF: 2.019
- 12. P. Sivakarthik, **V.Thangaraj**, K.Perumal Raj , J.Balaji, Synthesis of Co-doped Tin Oxide Nanoparticles for Photo Catalytic Degradation of Synthetic Organic Dyes, Digest Journal of Nanomaterials and Biostructures, vol. 11(3), 2016 935-943. DOI: www.chalcogen.ro/935\_SivaK.pdf. IF: 0.945
- 13. C. Surendra Dilip, **V. Thangaraj**, A. Paul Raj,Synthesis, spectroscopic characterization, biological and DNA cleavage properties of complexes of Nicotinamide. Arabian Journal of Chemistry 2016, 9, s731-s742. DOI: https://doi.org/10.1016/j.arabjc.2011.07.016, IF: 5.388
- 14. Perumal Raj, K, **Thangaraj, V**, Uthirakumar, AP, 'Enhanced Photocatalytic Behaviour of Synthesized Nickel Oxide Nanoparticles on Fluorescein under Different Irradiations', Optik vol. 127, issue 5, 2016 pp. 2631-2634. DOI: https://doi.org/10.1016/j.ijleo.2015.11.222 IF: 0.835
- 15. Perumal Raj, K, **Thangaraj, V**, Uthirakumar, AP & Sivakarthik, P 2015, 'Organic solvent assisted synthesis of Nickel oxide Nanoparticles and its biological applications', International Journal of Applied Engineering Research, vol. 10, no. 51, 873-876. URL: <a href="https://www.ripublication.com/ijaerspl3/ijaerv10n51\_139.pdf">https://www.ripublication.com/ijaerspl3/ijaerv10n51\_139.pdf</a> IF: 0.14
- 16. Perumal Raj, K, **Thangaraj, V** & Uthirakumar, AP 2015, 'Synthetic routes to nickel oxide Nanoparticles-on overview', Chem. Sci. Rew. Let., vol. 4, no. 14, pp. 494-501. IF: 6.208
- 17. Perumal Raj, K, **Thangaraj, V,** Uthirakumar, AP & Sivakarthik, P 2014, 'Synthesis, Characterization and Photocatalytic Study of Nickel Oxide Nanoparticles', The International Journal of Science & Technoledge, vol. 2, issue 10, pp. 113-116. IF: 1.05
- 18. Perumalraj K, Sivakarthik P and **Thangaraj V**, Comparative study of inhibition efficiency of some green inhibitors on mild steel corrosion at different temperatures. Int. J. Interdisci Res and Revs. 2013, 1(5) 1.
- 19. C. Surendra Dilip, **V. Thangaraj**, V.Siva Kumar and J. Joseph Prince, Synthesis and characterization of Co(III), Ni(II) and Cu(II) complexes of 3,8-dimethyl-

- 5,6-benzo-4,7-diazadeca-3,7-diene-2,9-dione Dioxime. Elixir Chemical Physics, Vol. 34, 2011, 2491-495. IF: 0.4
- 20. **V. Thangaraj,** N. Elias and A. Chitharanjan Hegde, Corrosion behavior of compositionally modulated multilayered Zn/Co electroplates developed by single bath technique. Journal of Applied Electrochemistry, Vol. 39(3) (2009) 339. . IF: 2.23
- 21. **Thangaraj V,** Characterization and corrosion behavior of Zn-Fe group metal alloys deposited by direct and pulsed current in acid chloride bath, Transaction of Institute of Metal Finishing (Trans IMF), Vol. 87(4) (2009) 208. IF: 1.33
- 22. **Thangaraj V** and A. Chitharanjan Hegde.Electrodeposition and Characterization of Zn-Co alloy. Russian Journal of Electrochemistry, Vol. 45(7) (2009) 756. . IF: 0.83
- 23. **Thangaraj V**, K. Ravishankar and A. C. Hegde, Surface modification by compositionally modulated Zn/Fe alloy coatings, Chinese Journal of Chemistry, Vol. 26 (2008) 2285. IF: 1.35.

#### d. Publication in National Journals:

- 1. Usha, V, **Thangaraj, V** & Thirunarayanan, G 2017, 'Antimicrobial potent(2E)-3-chloro-4-nitro-phenylchalcone', Indian Journal of Chemistry-B, vol. 56B (10), pp. 1094-1102. IF: 0.509
- 2. K Manikandan, P Mani, P Fermi Hilbert Inbaraj, T Dominic Joseph, **V Thangaraj** and J Joseph Prince, Influence of molar concentration on structural, morphological and optical properties of CdS thin films obtained by SILAR method. Indian Journal of Pure and Applied Physics 52 (2014) 354-59. . IF: 0.521
- 3. Perumal Raj, K, **Thangaraj, V**, Uthirakumar, AP & Sivakarthik, P, 'Cytotoxicity assessment of synthesized nickel oxide Nanoparticles on MCF-7 and A-549 cancer cell lines', Journal of Chemical and Pharmaceutical Sciences, Special issue 4, 2014, 269-271. IF: 0.1
- 4. P. Sivakarthik, **V.Thangaraj** Tin oxide nanoparticle catalyzed one-pot synthesis of 3, 4 dihydropyrimidinones Journal of Chemical and Pharmaceutical Sciences, Special issue 4, pp. 146-147. IF: 0.1
- 5. **Thangaraj V**, N. K. Udayashankar and A.C. Hegde, Development of Zn-Co alloy coatings by pulsed current from chloride bath, Indian Journal of Chemical Technology, Vol. 15(11) (2008) 581. IF: 0.568
- 6. K. Venkatakrishna, **V. Thangaraj**, A. Chitharanjan Hegde. Effect of bath composition and operating parameters on deposit character and corrosion behavior

- of Zn-Ni alloy. Indian Journal of Chemical Technology, Vol. 15(5) (2008) 252. IF: 0.568
- 7. **Thangaraj V** and A.C.Hegde.Electrodeposition and compositional behavior of Zn-Ni alloy. Indian Journal of Chemical Technology, Vol. 14(5) (2007) 246. IF: 0.568
- 8. **Thangaraj V** and A.C.Hegde, Anomalous Codeposition and Characterization of Zn-Fe Alloys. Bulletin of Electrochemistry, Vol. 22(8-9) (2006) 393. I.F. 0.33
- 9. **Thangaraj V** and A. C. Hegde, Electrodeposition and characterization of Zn-Ni alloy. Bulletin of Electrochemistry, Vol. 22(2) (2006) 49-53. I.F. 0.33.

#### e. Papers presented in International Conference:

- 1. **V. Thangaraj**, Investigation of black Zn-Ni alloy solar absorber coatings by electrochemical deposition, International Conference on Recent trends in Applied science and Technology, Periyar University, salem, Aug. 23-25, 2018.
- 2. **V. Thangaraj** and V. Selvaraju, synthesis of nanostructured Zn-Ni alloy by electrochemical deposition from acetate bath, International Conference on Recent trends in Applied science and Technology, Periyar University, Salem, Aug. 23-25, 2018
- 3. V. Usha, **V. Thangaraj** and G. Thirunarayanan, Synthesis and biological evaluation of some 3-chloro-4-nitrophenyl enones, International conference on chemistry of Biomolecule-current trends and future perspective, (ICCBCTFP-2016) Department Of Chemistry, Holy Cross College, Tiruchirappalli 620 024 July 27 &28, 2016.
- 4. Perumal Raj, K, **Thangaraj, V**, Uthirakumar, AP & Sivakarthik, P 2015, 'Organic solvent assisted synthesis of Nickel oxide Nanoparticles and its biological applications', International Conference on Advances in Science, Mathematics, English and its Applications (ICASMEA-2015), May 2015.
- 5. Perumal Raj, K, **Thangaraj, V**, Uthirakumar, AP & Sivakarthik, P 2014, 'Synthesis, Characterization and Photocatalytic Study of Nickel Oxide Nanoparticles', International conference on Materials and Drug Chemistry(MDC-14), 17<sup>th</sup> August 2014.
- 6. Perumal Raj, K, **Thangaraj, V**, Uthirakumar, AP & Sivakarthik, P 2014, 'Invitro Cytotoxicity Studies Of Nickel Oxide Nanoparticles On Cancer Cells Using MTT Assay', International conference on innovations and future research dimension on Nano-biopharmaceutical technology (Elsevier)-IFRDNBT at BIT, Tiruchy, October 9-10, 2014.

- 7. V. Usha, **V. Thangaraj**, Synthesis and Characterization of Chalcones by Ultrasonic Method, International Conference on Chemistry and Materials (ICCM-2014), Department Of Chemistry, Bharathidasan Institute Of Technology (Bit) Campus, Anna University, Tiruchirappalli 620 024, Nov 14 & 15, 2014.
- 8. V. Usha, **V. Thangaraj**, Synthesis and microbial activities of some chalcones, TEQIP II sponsored international conference on "Innovations and Future Research Dimensions on Nano Biopharmaceutical Technology, Department Of Pharmaceutical Technology, Anna University, BIT Campus, Tiruchirappalli, OCT 9& 10, 2014.
- 9. S. Aranvindha Raja and **V. Thangaraj**, 'Super Capacitance Studies of MnO<sub>2</sub> Nanoparticles by Various Wet Chemical Approaches' (Abstract no. AB-257), International Conference on Advances in New materials (ICAN 2014), June 20-21, 2014 held at University of Madras, Chennai.
- 10. A.Ganesh Pandi and **V. Thangaraj**, 'Synthesis and characterization of MgO nanostructures' (Abstract no. AB-260) International Conference on Advances in New materials (ICAN 2014), June 20-21, 2014 held at University of Madras, Chennai.
- 11. **V. Thangaraj** and A. Chitharanjan Hegde, Electrolytic synthesis and nanostructured multilayered coatings of Zn-Ni-Fe alloy. presented in International Conference on Functional Materials for Advanced Technology -2009 (ICFMAT-09) held on January 29-30, 2009 at Velammal Engineering College, Chennai. (**Best Presentation award**).
- 12. Electrolytic synthesis of nanostructured multilayer coatings. **Thangaraj V** and A. C. Hegde presented in NanoTech Insight'07 conference as held on March 10-17, 2007 at Egypt.
- 13. Study on the behavior of electrodeposited Zn-Ni alloy. **Thangaraj V** and A. C. Hegde presented in the International symposium on Advances in Electrochemical Science and Technology (ISAEST-8) held on Nov. 28-30, 2006 at Goa, India.
- 14. Zn-Co alloy deposition by continuous and pulsed current. **Thangaraj V** and A. C. Hegde presented in International Symposium of Research Scholars on Metallurgy, Material Science and engineering (ISRS-06) held on December 18-20, 2006 at IIT, Madras, Chennai, India.

15. Electrodeposition of cost effective black nickel solar absorber coatings. **Thangaraj V** and A. C. Hegde presented in International Conference on Electrochemical Power Systems (ICEPS – 2) held on Dec.20-21, 2004 at Hyderabad, India.

### > <u>f. Papers presented in National Conference:</u>

- 1. Electrodeposition and characterization of Zn-Co alloys by direct and pulsed current. **Thangaraj V** and A. C. Hegde, presented in National seminar on Current developments in Chemistry (NSDC-07) held on January 18-19, 2007 at Bharathiyar University, Coimbatore.
- 2. Nanostructured multilayer coating A new paradigm in electroplaing. **Thangaraj V** and A. C. Hegde presented in Fourteenth National Congress on corrosion control held on Nov. 30 Dec.1, 2007 at Holycross college, Trichy, Tamilnadu, India.
- 3. Development of compositionally modulated multilayerd Zn/Ni electroplates for improved corrosion resistance. **Thangaraj V** and A. C. Hegde presented in Fourteenth National Convention of Electrochemsits (NCE-14) held on December 6-7, 2007 at IGCAR, Kalpakkam, India.
- 4. Electrodeposition of Zinc-iron compositionally modulated multilayered coatings and their corrosion behaviors. **Thangaraj V** and A.C. Hegde presented in Advances in Surface and Interface Analysis (ASIA-2007) held on 13, 14 12- 2007 at Periyar university, Salem.
- 5. Comparison of DC and pulse plated Zn-Fe alloy deposits. **Thangaraj V** and A.C. Hegde presented in Advances in Surface and Interface Analysis (ASIA-2007) held on 13, 14 12- 2007 at Periyar university, Salem.
- 6. Electrochemical studies of pulse plated Zn-Ni alloy from sulphate bath. **Thangaraj V** and A.C. Hegde presented in Advances in Surface and Interface Analysis (ASIA-2007) held on 13, 14 12-2007 at Periyar university, Salem.
- 7. Corrosion behavior of pulse plated Zn-Co alloy from sulphate bath. **Thangaraj V** and A.C. Hegde presented in Advances in Surface and Interface Analysis (ASIA-2007) held on 13, 14 12-2007 at Periyar university, Salem.

- 8. Corrosion behavior of compositionally modulated multilayered Zn/Co electroplates developed by single bath technique. **Thangaraj V** and A. C. Hegde presented in Bangalore NanoTech held on December 6-7, 2007 at Bangalore, India.
- 9. Electrodeposition of bright Zn-Co alloy from Sulphate bath. **Thangaraj V** and A. C. Hegde presented in Thirteenth National Convention of Electrochemists (NCE-13) held on May 5-6, 2006 at Central Electrochemical Research Institute (CECRI), Karaikudi, India.
- 10. Zn-Co anomalous codeposition and its corrosion performance. **Thangaraj V** and A. C. Hegde presented in the National Conference on Currents Trends in Chemical Research (CTCR 2006) during May 13-14, 2006 at Mangalore University, Mangalagangotri, Mangalore, India.
- 11. Electrodeposition and corrosion behavior of Zn-Fe alloy. **Thangaraj V** and A. C. Hegde presented in Thirteenth National Congress on corrosion control held on October 12-14, 2006 at Mangalore, Karnataka, India.
- 14. Electrochemical deposition and characterization of Zn-Ni alloys deposited by direct and pulse current. **Thangaraj V** and A. C. Hegde presented in Thirteenth National Congress on corrosion control held on October 12-14, 2006 at Mangalore, Karnataka, India.
- 12. Electrodeposition and characterization of Zn-Co alloy **Thangaraj V** and A. C. Hegde presented in National conference of Emerging Trends and New vistas in Chemistry (EMTIC-2005) held on Nov. 29, 30 2005 at University of Calicut at Calicut, India.
- 13. Electrodeposition and characterization of Zn-Ni alloy. **Thangaraj V** and A. C. Hegde presented in National Conference of Recent Advances in Electrochemical and Surface Sciences for Industry and Society held on Dec. 3-4, 2004 at Kuvempu University, Shimoga, India.
- 15. Inhibitive effect of extracts of pongamia glabra and dalbergia sissoides on corrosion of aluminium in hydrochloric acid. Thangaraj V and N. S. Nagarajan, presented in National Conference in Futuristic aspects of electrochemical science and technology held on 22-23<sup>rd</sup> July, 2003 at CECRI, Karaikudi, India.

#### g. Patents:

- Dr.T.Jayasankar, **Dr.V.Thangaraj**, Dr.R. Udhayakumar, Dr.P.Vijayarajan, IOT Enabled Bed Dryer Apparatus and System – Design, Design No. 376710-001. Date: 04.01.2023 (Granted).
- 2. **Dr. V. Thangaraj**, Dr. K. Ravishankar, Dr.R.Udhayakumar, Dr.T.Jayasankar, Dr. P. Maheswaravenkatesh, INDOOR AIR QUALITY MONITORING SYSTEM. Design No. 394915-001, Date: 12.09.2023. (Granted).
- 3. S.A.T. Shanmugapriya, **Dr.V.Thangaraj** and P. Madasamy, Smart strip for instant food quality indication, Design No. 422578-001, Date: 08.07.2024. (Granted).
- 4. Dr. K. Ravishankar, Dr.T,Jayasankar, **Dr.V.Thangaraj**, Intra Cardiac Oximeter for diagnosis of heart disease, Design No. 424780-001, Date:26.07.2024.

#### ➤ List of Seminar / Short Term Course /FDP/ Workshop organized:

- 1. **Convener,** two days webinar on open educational resources, knowledge management and organizational culture in Libraries during 29.05.2020 30.05.2020.
- 2. **Coordinator,** International Conference on Advances in Biological, Chemical and Physical Sciences (ABCPS'2017) during March 13<sup>th</sup>-15<sup>th</sup> 2017 at Anna University, BIT Campus, Tiruchirappalli.
- 3. **Convener,** National Seminar on "Career guidance, GATE exam preparation and Developmen of Soft skills (CGSS-2014) on 6<sup>th</sup> Feb, 2014 at Anna University, BIT Campus, Tiruchirappalli.
- 4. **Convener,** National seminar on "Research Paper, Dissertation and Project proposal preparation (RDP-2014) on 14<sup>th</sup> Feb, 2014 at Anna University, BIT Campus, Tiruchirappalli.
- 5. **Convener,** National seminar on "e-Resources for Scholarly Communication" on 28<sup>th</sup> Feb, 2014 at Anna University, BIT Campus, Tiruchirappalli.
- 6. **Coordinator**, Royal Society of Chemistry (RSC) sponsored One day National Seminar on Photocatalysis for Sustainability: Fundamentals Applications (PHOCATS-2013) on 9<sup>th</sup> Oct, 2013 at Anna University, BIT Campus, Tiruchirappalli.

7. **Coordinator,** National Seminar on Modern Trends in Chemistry (MTC-2013), on 17-18<sup>th</sup> Dec, 2013 at Anna University, BIT Campus, Tiruchirappalli.

#### > List of Orientation /Refresher/FDP attended:

#### a. Orientation Course

- 1. Participated in 4 weeks Faculty Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of higher education" from 23.04.2023 to 22.05.2023 Organized by TLC-Ramanujan College, University of Delhi (Online).
- 2. Participated in UGC Sponsored 110<sup>th</sup> Orientation Course Programme in UGC-Academic Staff College, Pondicherry University, Puducherry from 19.12.2012 to 15.01.2013.

#### b. Refresher Course

- 1. Participated in online two week refresher course in Chemistry from 30.06.2023 to 14.07.2023 Organized by TLC-Ramanujan College, University of Delhi (Online).
- 2. Attended UGC Sponsored Refresher Course Programme in UGC-Academic Staff College, University of Kerala, Tiruvananthapuram from 22.10.2013 to 11.11.2013.

#### c. FDP/Industrial Training

- 1. Participated in Six day Faculty empowerment Programme on Tamilzhar marabhum Thozhil nutpa arivum from 11.03.2024 to 16.03.2024 organized by Centre for Development of Tamil in Engineering and Technology at UCE-BIT Campus, Anna University, Trichy.
- 2. FDP on Designing MOOCS, Digital Skills and E-Content development during 17<sup>th</sup>-30<sup>th</sup> August, 2020 conducted by Annamalai University, Chidambaram (Online).
- 3. FDP on Managing Online classes and Co-creating MOOCS 3.0 from 25<sup>th</sup> July 2020 to 10<sup>th</sup> August 2020 conducted by Ramanujan College, University of Delhi (Online).
- 4. Industrial Training on Basic Science and Communication during 8<sup>th</sup>-26<sup>th</sup> June, 2020 in BSNL Office, Trichy.
- 5. FDP on Multimedia enriched E-Content Development during 21st-26th May, 2020 conducted by SGTB Khalsa College, University of Delhi (Online).

- 6. Participated in FDP on Novel materials for energy and biomedical (COVID-19) healthcare applications from 11.05.2020 to 16.05.2020 Organized by M.Kumarasamy College of Engineering, Karur.
- 7. FDP on on Multi-disciplinary approaches in chemical Sciences during 18<sup>th</sup>-31<sup>st</sup> July 2016 in Anna University, BIT Campus, Tiruchirappalli.
- 8. MDP on Academic leadership programme for TEQIP Institutions during 23<sup>rd</sup> 28<sup>th</sup> November 2015 at IIM-Kozhikode.
- 9. FDP on Advanced research in materials for engineering and technological applications during 17<sup>th</sup> 30<sup>th</sup> July 2015 in Anna University, BIT Campus, Tiruchirappalli.
- 10. FDP on New perspective in drug discovery and progressive technological developments during 4<sup>th</sup> -17<sup>th</sup> May 2015 in Anna University, BIT Campus, Tiruchirappalli.
- 11. FDP on Current Developments in Life Sciences: An Interdisciplinary Approach (CDLS-2013)' during 19<sup>th</sup> August 25<sup>th</sup> August, 2013 in Anna University, BIT Campus, Tiruchirappalli.
- Professional Developmental Activities: (details like participation in Seminar/Webinar/Workshop/Short term Course... etc)

#### • List of Seminar/Workshop/Short term Course attended:

- 1. Participated in workshop on "Nanomaterials for emerging applications from 25.02.2022 to 26.02.2022 organized by NIT, Trichy.
- 2. Workshop on "Sustainable Municipal Solid Waste Management (SMSWM'10)" in Anna University of Technology, Tiruchirappalli, on 4<sup>th</sup> Oct. 2010.
- 3. National Seminar on "Societal Implications of Nanoscience & Technology" in Anna University of Technology, Tiruchiappalli, on 23<sup>rd</sup> Dec. 2010.

#### • List of Webinar attended

1. Participated in One day webinar on Designing MOOCS, Digital skills and e-Content Development on 14.08.2020 organized by Annamalai University, Chidambaram.

- 2. Participated in One day webinar on Blood donation importance during COVID-19 on 09.08.2020 organized by UCE-BIT Campus, Anna University, Tiruchirappalli.
- 3. Participated in One day webinar on Yoga and Natural way of living on 02.08.2020 organized by UCE-BIT Campus, Anna University, Tiruchirappalli.
- 4. Participated in webinar on economic impact of COVID-19 on Indian economy: A special reference to employability on 30.07.2020 organized by Sri Parasakthi College, Courtallam.
- 5. Participated in webinar on the practicality of enhancing the emotional intelligence of staff and students amidst COVID Pandemic from 24.06.2020 to 25.06.2020 organized by UCE-BIT Campus, Anna University, Tiruchirappalli.
- 6. Participated in International webinar on Recent advances in Material Science and Nanotechnology from 04.06.2020 to 06.06.2020 organized by Bannari Amman Institute of Technology, Sathyamangalam.
- 7. Participated in one day webinar on achieving excellence in higher education in India in the 21<sup>st</sup> century on 03.06.2020 organized by Sharda University, Delhi on 03.06.2020.
- 8. Participated in webinar on Material Science: Webinar Series –I from 18.05.2020 to 23.05.2020 Organized by Sathyabama Institute of Science and Technology, Tamilnadu.
- 9. Participated in International webinar on materials for energy, environment and healthcare applications during 21.05.2020 22.05.2020 organized by Gandhigram Rural Institute, Dindigul.
- 10. Participated in webinar on Step towards Healthy life through Ayurveda from 05.05.2020 to 07.05.2020 organized by RK University Ayurvedic College and Hospital, Rajkot.
- 11. Participated in webinar on Examinations in wake of COVID-19 on 05.05.2020 Organized by K.A. (P.G) College, UP.
- 12. Participated in one day webinar on Corono pandemic and economic challenges in India on 04.05.2020 organized by GAD-TLC of MHRD, SGTB Khalsa College, University of Delhi.

- 13. Participated in webinar on Learn organically, the commYOUnication skills on 03.05.2020 organized by BTTC, Mumbai,
- 14. Participated in one day webinar on Challenges and opportunities before Indian higher education due to COVID-19 on 02.05.2020 organized by GAD-TLC of MHRD, SGTB Khalsa College, University of Delhi.
- 15. Participated in one day webinar on Towards excellence in higher education in India in the 21<sup>st</sup> century: Challenges and opportunities on 01.05.2020 organized by GAD-TLC of MHRD, SGTB Khalsa College, University of Delhi.
- 16. Participated in one day webinar on Roles of Teachers in technology driven higher education on 28.04.2020 organized by GAD-TLC of MHRD, SGTB Khalsa College, University of Delhi.
- 17. Participated in COVID-19 pandemic general awareness quiz for spreading awareness about the mode of transmission of COVID-19 on 27.04.2020 Organized by M.E.S Abasaheb Garware College, Pune.
- 18. Participated in webinar on Basic Principles of Spectroscopy from 17.04.2020 to 19.04.2020 organized by AVS College of Arts and Science.
- 19. Participated in webinar on Artificial Intelligence and Drug discovery on 05.01.2020 organized by SVERI College of Pharmacy, Maharashtra.
- 20. Participated in National level E-Quiz on Environmental Studies on 06.11.2020 conducted by Sri Parasakthi College, Courtallam
- 21. Participated in COVID-19 Awareness Quiz on 17.05.2020 conducted by Maharishi Markandeshwar (Deemed to be University), Mullana.
- ➤ **Professional recognitions:** (details like chairperson/member of a committee, reviewer, editor ...etc)

#### • Doctoral Committee Member

1. Mrs. V. Sathiyajothi working for PhD under the guidance of Dr.N.Viswanathan, Assistant Professor, Department of Chemistry, UCE, Dindigul.

- 2. Ms.P. Naga Nanthini, under the guidance of Dr.J.Helen Ratna Monica, Associate Professor, Department of Chemistry, The American College, Madurai.
- 3. Ms.K.AMUTHA BHARATHI [ 23PHD0451] working for PhD under the guidance of Dr. S. Karthikeyan, Professor, Department of Chemistry VIT, Vellore.
- 4. Mr. N. Prakash under the guidance of Dr.C.Narendhar, Assistant Professor, Department of Nanoscience & Technology, Sri Ramakrishna Engineering College, Coimbatore.
- 5. Mr.M.devendiran, under the guidance of Dr.A.P.Uthirakumar, Associate Professor, Department of Chemistry Sona College of Technology, salem
- **PhD Viva-voce Examiner,** Conducted PhD Viva voce examination for 3 Ph.D candidates registered under Bharathidasan University, Trichy during 2014-2016.
- Acted as an **External Auditor** for Theory Paper Audit on 23.07.2024 at K.Ramakrishnan College of Technology, Trichy.
- Served as **Member of Board of Studies** for B.E/B.Tech Engineering Chemistry program of Mahindra Engineering College, Namakkal for the period of 2022-2023 2024-2025.
- **Selection Committee Member** for the selection of Research Scholars in Department of Chemistry, Physics and Biotechnology of Dhanalakshmi Srinivasan University (2024).
- **Inspection Committee Member** for Affiliation of Colleges in Anna University during 2013-2014.
- Served as **Member of Board of studies** for B.Sc., Chemistry program of Parvathy's Arts and Science College, Dindigul for the period of 2024-2025.
- Served as **Reviewer** for several international journals from springer, Elsevier, Wiley etc.,

#### > Guest lectures delivered:

1. Delivered invited lecture in Department of Chemistry, Jamal Mohamed College, Trichy in Oct'2014.

- 2. Delivered invited lecture in FDP on conducted by Department of Chemistry, UCE-BIT Campus, Anna University, Trichy in Dec'2013.
- 3. Delivered invited lecture in FDP on Advanced manufacturing methods and materials on 28.06.2016 conducted by Department of Mechanical Engineering, UCE-BIT Campus, Anna University.
- 4. Delivered invited lecture in FDP on Advanced manufacturing methods and materials on 29.06.2016 conducted by Department of Mechanical Engineering, UCE-BIT Campus, Anna University.
- 5. Delivered invited lecture in FDP on Thermal engineering application for sustainable improvement on 19.06.2015 conducted by Department of Mechanical Engineering, UCE-BIT Campus, Anna University, Trichy.
- 6. Delivered invited lecture in FDP on Thermal engineering application for sustainable improvement on 25.06.2015 conducted by Department of Mechanical Engineering, UCE-BIT Campus, Anna University, Trichy.
- 7. Delivered invited lecture on 25.07.2024 conducted by Departmeent of Chemistry, Parvathy's Arts and Science College, Dindigul.

### > Additional / Academic Responsibilities at University:

- 1. **Deputy Warden,** Men's Hostel from September 2024 to till date.
- 2. **Coordinator SC/ST Cell** from May 2022 to till date.
- 3. **Member, Ban of Single Use Plastic (SUP) Monitoring Committee** from September 2024 to till date.
- 4. **Department Purchase Coordinator** from January 2023 to till date.
- 5. **Technical Committee Member for Central Library** for academic year 2024-2025
- 6. Discipline Committee Member for KRIDA -24 (Inter Departmental Tournament for the academic year 2023-2024.
- 7. Coordinator Exam Cell from September 2022 to September 2023.
- 8. **Coordinator Library** from October 2013 to September 2022.
- 9. **Department Stock Verification Coordinator** from January 2020 to December 2021.

- 10. **Department Purchase Coordinator** from January 2015 to December 2019.
- 11. **Member, NBA Centre Pool Committee** in academic year 2013-2014.
- 12. **Stock verification Officer** for Civil Engineering Dept. in the calendar year of 2010-2011 and 2011-2012.
- 13. **Member, Anti ragging Committee** in Anna University, Trichy (2012-2013).
- 14. Member, **Exam Cell**, in academic year 2012-2013.
- 15. **Student Counselor** in Anna University, Trichy (2010-11 and 2011-2012).
- 16. **Dept Coordinator**, **SC-ST Cell**, in academic year 2011-2012.
- 17. **Member, Anti ragging Committee** in Manipal Institute of Technology (MIT), Manipal (2008-2009).
- 18. **Student Counselor** in Manipal Institute of Technology (MIT) (2008-2009).

#### **DECLARATION:**

I certify that the information furnished above is correct and true to the best of my knowledge and belief.

Signature of the staff member

Head of the Department

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