CURRICULUM VITAE

| NAME | : **Dr.V.R.Sarma Dhulipala** |

ADDRESS   : Dept of Physics
Anna University-BIT Campus,
Tiruchirappalli, Tamil Nadu
E-mail: dvrsarma@gmail.com,
dvrsarma@aubit.edu.in

EDUCATIONAL QUALIFICATIONS

Degree	Specialization	Name of the University	Year of passing
Ph.D.	Wireless Sensor Networks	Anna University, Chennai	2013
M. Phil.	Physics	JNT University, Hyderabad	2006
M.Sc.	Electronics	Andhra University, Vizag	2000
B.Sc.	Maths, Physics, Electronics	Andhra University, Vizag	1997

PROFESSIONAL EXPERIENCE: 22 years 09 months

Name of the Institution / University	Designation	Duration
Anna University, BIT Campus Tiruchirappalli	Assistant Professor (Sr.Gr)	2015 to till date
Anna University,BIT Campus, Tiruchirappalli	Assistant Professor	2012 to 2015
Anna University, Tiruchirappalli (erstwhile)	Assistant Professor	2009 – 2012
Anna University, Tiruchirappalli (erstwhile)	Lecturer (Contract)	2008-2009
Anna University, Tiruchirappalli (erstwhile)	Teaching Research Associate	2007-2008
Maharajah's PG Courses, Vizianagaram, Andhra Pradesh	Assistant Professor	2000-2007

LIST OF PUBLICATIONS IN INTERNATIONAL JOURNALS

1. G. Jayaraman and **V. R. Sarma Dhulipala**, "AEECA for reliable communication to enhance the network life time for wsn," Intelligent Automation & Soft Computing, vol. 35, no.2, pp. 1705–1719, 2023. [**I.F:3.401**]

2. Sivanesh, S., **V. R. Sarma Dhulipala**, Analytical Termination of Malicious Nodes (ATOM): An Intrusion Detection System for Detecting Black Hole attack in Mobile Ad Hoc Networks. Wireless Personal Communication 124, 1511–1524 (2022). https://doi.org/10.1007/s11277-021-09418-8. [**I.F:2.017**]

3. Jayaraman, G., **V. R. Sarma Dhulipala**, FEECS: Fuzzy-Based Energy-Efficient Cluster Head Selection Algorithm for Lifetime Enhancement of Wireless Sensor Networks. Arabian Journal of Science and Engineering 47, 1631–1641 (2022). https://doi.org/10.1007/s13369-021-06030-7. [**I.F:2.807**]

4. Pradeep, N.S., Aarthi, V. & **V. R. Sarma Dhulipala**. Upgraded Max-Log-MAP algorithm using adaptive correction factors for decoders in AWGN and fading channel. J Ambient Intelligence and Humanized Computing 13, 3245–3255 (2022). https://doi.org/10.1007/s12652-021-03160-6.

5. Sivanesh, S., **V.R.Sarma Dhulipala** (2021). Accurate and Cognitive Intrusion Detection System (ACIDS): a Novel Black Hole Detection Mechanism in Mobile Ad Hoc Networks. Mobile Netw Appl 26, 1696–1704. https://doi.org/10.1007/s11036-019-01505-2. [**IF: 3.077**]

6. Manojprabu, M., & **V.R.Sarma Dhulipala** (2021). Power Aware Hessian Multi-set Canonical Correlations Based Algorithm for Wireless EEG Sensor Networks. Wireless Personal Communications, 117(4), 2745-2756. [**I.F:2.017**]

7. Kumar, M. S., **V.R.Sarma Dhulipala**, & Baskar, S. (2020). Fuzzy unordered rule induction algorithm based classification for reliable communication using wearable computing devices in healthcare. Journal of Ambient Intelligence and Humanized Computing, 1-12, pp.3515-3526.

8. Kumar, M. S., & **V.R.Sarma Dhulipala** (2020). Fuzzy Allocation Model for Health Care Data Management on IoT Assisted Wearable Sensor platform. Measurement, Vol.116, pp.108249. [**I.F:5.131**]

9. V.Aarthy, **V.R.Sarma Dhulipala** and P.Rangababu, "Attenuation Factor Approach to Minimize the Correlation Effect in Soft Output Viterbi Algorithm", Physical Communication (Elsevier), 39(2020) [**I.F:2.379**]

10. M.Manojprabu and **V.R.Sarma Dhulipala**, "Improved Energy Efficient Design in Software Defined Wireless Electroencephalography Sensor Networks(WESN) using Distributed Architecture to Remove Artifact from EEG, **Computer Communication (Elsevier)**, Vol.152, February 2020, pp.266-271 [**IF:5.047**]

11. Aarthi, V., & **V.R.Sarma Dhulipala** (2021). Improved SOVA decoding for UEP wireless transmission of JPEG 2000 images over MIMO-OFDM systems. Journal of Ambient Intelligence and Humanized Computing, 12(6), 5931-5942.

12. Baskar, S., **V.R.Sarma Dhulipala,** Shakeel, P. M., Sridhar, K. P., & Kumar, R. (2019). Hybrid fuzzy based spearman rank correlation for cranial nerve palsy detection in MIoT environment. *Health and Technology*, 1-12.

13. Baskar, S., Periyanayagi, S., Shakeel, P. M., & **V.R.Sarma Dhulipala** (2019). An Energy persistent Range-dependent Regulated Transmission Communication Model for Vehicular Network Applications.vol.152, pp.144-153 *Computer Networks*. [**IF: 5.493**]

14. Gomathi, P., Baskar, S., Shakeel, P. M., & **V.R.Sarma Dhulipala** (2020). Identifying brain abnormalities from electroencephalogram using evolutionary gravitational neocognitron neural network. *Multimedia Tools and Applications*, vol.79, Issue.15-16, pp. 10609–10628 .[**IF: 2.577**]

15. Gomathi, P., Baskar, S., Shakeel, M. P., & **V.R.Sarma Dhulipala** (2019). Numerical Function Optimization in Brain Tumor Regions Using Reconfigured Multi-Objective Bat Optimization Algorithm. *Journal of Medical Imaging and Health Informatics*, *9*(3), 482-489. [**IF: 0.659**]

16. Shakeel, P. M., Baskar, S., **V.R.Sarma Dhulipala**, Mishra, S., & Jaber, M. M. (2018). Maintaining security and privacy in health care system using learning based Deep-Q-Networks. *Journal of medical systems*, *42*(10), 186. [**IF:4.920**]

17. Shakeel, P. M., Baskar, S., **V.R.Sarma Dhulipala**, & Jaber, M. M. (2018). Cloud based framework for diagnosis of diabetes mellitus using K-means clustering. *Health information science and systems*, *6*(1), 16. [**IF:5.017**]

18. Sridhar, K. P., Baskar, S., Shakeel, P. M., & **V.R.Sarma Dhulipala** (2019). Developing brain abnormality recognize system using multi-objective pattern producing neural network. *Journal of Ambient Intelligence and Humanized Computing*, vol.10, pp.3287-3295.

19. Baskar, S., & **V.R.Sarma Dhulipala** (2018). M-CRAFT-Modified Multiplier Algorithm to Reduce Overhead in Fault Tolerance Algorithm in Wireless Sensor Networks. Journal of Computational and Theoretical Nanoscience, 15(4), 1395-1401.

20. Bhaskar V.V., Lalitha.V.V.,Baskar.S., **V.R.Sarma Dhulipala** (2018). Assessments of various Hazardous Gases , PM2.5 and PM10 Concentrations in various Cities of India at Different Mean. International Journal of Pure and Applied Mathematics, 119(12)

21. Baskaran, S., Selvi, J. A. V., & **V.R.Sarma Dhulipala** (2018). Trust Based Cluster-Energy Efficient Multicast Routing In Mobile Adhoc Networks. Appl. Math, 12(2), 421-429.

22. Baskar, S., & **V.R.Sarma Dhulipala** (2018). Biomedical Rehabilitation: Data Error Detection and Correction Using Two Dimensional Linear Feedback Shift Register Based Cyclic Redundancy Check. Journal of Medical Imaging and Health Informatics, 8(4), 805-808. [**IF: 0.659**]

23. Baskar, S., and **V.R.Sarma Dhulipala** (2018). "Secure and compact implementation of optimized montgomery multiplier based elliptic curve cryptography (ECC) on FPGA with road vehicular traffic collecting (RVTC) protocol for VANET application" in International Journal of Heavy Vehicle Systems. Vol.34 (3-4), pp.485-497 **[IF: 0.568]**

24. Baskar, S., & **V.R.Sarma Dhulipala** (2018). Collaboration of Trusted Node and QoS Based Energy Multi Path Routing Protocol for Vehicular Ad Hoc Networks. *Wireless Personal Communications*, 1-10. **[IF:2.067]**

25. **V.R.Sarma Dhulipala**, & Karthik, N. (2017). Trust management technique in wireless sensor networks: Challenges and issues for reliable communication: A review. CSI Transactions on ICT, 5(3), 281-294.

26. Baskar, S., & **V.R.Sarma Dhulipala**. (2016). Comparative analysis on fault tolerant techniques for memory cells in wireless sensor devices. Asian Journal of Research in Social Sciences and Humanities, 6(cs1), 519-528.

27. Kumar, M. G., & **V.R.Sarma Dhulipala**. (2016). Fuzzy Logic Based Stress Level Classification using Physiological Parameters. Asian Journal of Research in Social Sciences and Humanities, 6(cs1), 697-713.

28. **V.R.Sarma Dhulipala**., Devadas, P., & Murthy, P. T. (2016). Mobile phone sensing mechanism for stress relaxation using sensor networks: a survey. Wireless Personal Communications, 86(2), 1013-1022. **[IF:2.067]**

29. Hadimani, H. C., Latte, M. V., Tejomurthy, P. H. S., & **V.R.Sarma Dhulipala** (2015). Geometric based modeling for enhancing coverage area minimizing probability of unnecessary handovers in Heterogeneous Wireless Networks. International Journal of IEEE., 10-14.

30. Hadimani.H.C., Mrityunjaya Latte Latte V.,Tejomurthy.P.H.S., **V.R.Sarma Dhulipala** (2015). Equalization Suitability Estimation for 2X2 MIMO using QAM. International Journal of Applied Engineering Research, 10(12), 30485-30498.

31. Baskar.S., & **V.R.Sarma Dhulipala** (2015). Reliablity Oriented Placement and Routing Analysis in Designing Low Power Multipliers. International Journal of Applied Engineering Research., 10(44). 31382-31390.

32. **V.R.Sarma Dhulipala**, & Udhaya, M. S. (2015). Secure health assistance in a ward-based pervasive environment. International Journal of Telemedicine and Clinical Practices, 1(1), 64-76.

33. **V.R.Sarma Dhulipala**, & Kanagachidambaresan, G. R. (2014). Cardiac care assistance using self configured sensor network—a remote patient monitoring system. Journal of the Institution of Engineers (India): Series B, 95(2), 101-106.

34. **V.R.Sarma Dhulipala**, Karthik, N., & Chandrasekaran, RM. (2013). A novel heuristic approach based trust worthy architecture for wireless sensor networks. Wireless personal communications, 70(1), 189-205. **[IF:2.067]**

35. Arivubrakan, P., & **V.R.Sarma Dhulipala**. (2013). Sentry Based Intruder Detection Technique for Wireless Sensor. Journal of Artificial Intelligence, 6(2), 175-180.

36. Bhuvaneswari, E., & **V.R.Sarma Dhulipala**. (2013). The study and analysis of classification algorithm for animal kingdom dataset. Inf. Eng, 2(1), 412-414.

37. Manojprabu, M., and **V.R.Sarma Dhulipala**, (2013): "Wireless Physiological Parameter Monitoring and Recording System.", IOSR Journal of Electronics and Communication Engineering , 5:](1)1 25-35.

38. Mani. U., Chandrasekaran.R.,& **V.R.Sarma Dhulipala**, (2013).Study and Analysis of Routing Protocols in Mobile Ad hoc Network. International Journal of Computer Science.

39. **V.R.Sarma Dhulipala**., Kanagachidambaresan, G. R., & Chandrasekaran, R. M. (2012). Lack of power avoidance: A fault classification based fault tolerant framework solution for lifetime enhancement and reliable communication in wireless sensor networks. Information Technology Journal, 11(6), 719.

40. Kanagachidambaresan, G. R., **V.R.Sarma Dhulipala**, & Udhaya, M. S. (2012). Markovian model based trustworthy architecture. Procedia engineering, 30, 718-725.

41. Christy, F., & **V.R.Sarma Dhulipala** (2012). Analysis of Selective Routing Strategies for Fault Tolerance In Wireless Sensor Networks. International Journal on Computer Science and Engineering, 4(5), 749.

42. Revathi, G., **V.R.Sarma Dhulipala**, & Kanagachidambaresan, G. R. (2012). Intelligent Decision Making System for Car Parking. International Journal of Computer Applications, 37(9), 5-9.

43. Arivubrakan, P., & **V.R.Sarma Dhulipala** (2012). QoS Enhancement by varying Transmission Range in Wireless Ad-hoc Networks. International Journal of Computer Applications (0975–8887), 37(9).

44. Nandhini, M., & **V.R.Sarma Dhulipala**. (2012). Energy-Efficient target tracking algorithms in wireless sensor networks: an overview. IJCST, 3(1), 66-71.

45. Saravanan, D., Chandrasekaran, RM., Prabha, B. V., and **V.R.Sarma Dhulipala** (2011). Trust worthy architecture implementation for mobile ad hoc networks. International Journal on Computer Science and Engineering, 3(7), 2601-2609.

46. Uma, B., Jegatheswari, S., & **V.R.Sarma Dhulipala** (2011). Enhanced Energy Management Multichannel MAC Protocol for MANET. Wireless Communication, 3(12), 897-901.

47. **V.R.Sarma Dhulipala**, Prabha, B. V., & Chandrasekaran, RM. (2010). Trust Worthy Architecture for Mobile Ad Hoc Network Environment. In Information Processing and Management (pp. 557-560). Springer, Berlin, Heidelberg.

48. Kanagachidambaresan, G. R., **V.R.Sarma Dhulipala**, and Vanusha, D. (2011). Pervasive computing based healthcare using body sensor networks.

49. Janani, K., **V.R.Sarma Dhulipala** and N.Prabakaran. " SAHMS-Scatternet Assisted Health Monitoring System". International Journal of Emerging Technology and Advanced Engineering 2.3(2012): 90-96.

50. Malany, A. B., **V.R.Sarma Dhulipala**, and Chandrasekaran, RM. (2009). Throughput and delay comparison of MANET routing protocols. Int. J. Open Problems Compt. Math, 2(3), 461-468.

51. Sivaraman, R., **V.R.Sarma Dhulipala**., Aarthy, V., & Kavitha, K. (2009). Energy Comparison and Analysis for Cluster Based Environment in Wireless Sensor Networks. International Journal of Recent Trends in Engineering, 2(4), 89.

52. Sivaraman, R., **V.R.Sarma Dhulipala**, Sowbhagya, L., & Prabha, B. V. (2009). Comparative Analysis of QoS Metrics in Mobile Ad Hoc Network Environment. International Journal of Recent Trends in Engineering, 2(4), 68.

53. **V.R.Sarma Dhulipala**, Chandrasekaran, RM., & Prabakaran, R. (2009). Timing Analysis and Repeatability Issues of Mobile Ad-Hoc Networking Application traffics in Large Scale Scenarios. International Journal of Recent trends in Engineering, 1(1), 463.

54. Sheela, M. S., Raja, A. S., & **V.R.Sarma Dhulipala** (2010). Parametric analysis of mobile ad-hoc network environment. International Journal of Computer Applications, 9(9), 33-36.

SPONSORED PROJECTS (COMPLETED / ON GOING)

S. No.	Name of the Project	Role	Funding Agency/ Division	Amount / INR (in Lakhs)	Status
1.	Suddha Vaayu: An Electrical Chamber for Detection and Mitigation of Air Pollution	Co-Principal Investigator (Lead : IIT Delhi)	DST/MISG	20.02	**Completed** (2018-2022)
2.	Demonstration of Grid Supportive EV Charger and Charging Infrastructure at LT Level	Co-Lead (International/ Multi Consortium Collaborative Project in Mission Innovation on Smart Grids) (Lead: IIT Delhi)	DST/MISG	10.27	Ongoing (2018-2023)
3.	Collecting Particulate Matter in air using filters placed on the top of a car	Co-Principal Investigator (Lead : IIT Delhi)	DST/TMD	6.16	**Completed** (2018-2020)
4.	Student Innovative Projects "IONT based Ultra Low Power Sensors Assisted Healthcare Monitoring System.	Mentor	CTDT , Anna University, Chennai	0.25	**Completed** 01 July 2019- 31 December 2019
5.	National workshop on Recent Advancements in Embedded Systems with IoT and its Application	Convener	SERB	1.65	Completed (2018-2019)
6.	Career Guidance and Counseling for the Current Youth	Coordinator	RGNIYD, Ministry ofYouth Development and Sports	1.3975	**Completed** (2016)
7.	Seed Money Grant	Faculty Incumbent	TEQIP – II	0.50	**Completed** (2016)
8.	Mobile Phone Sensing Mechanism for Stress Relaxation using Wireless Sensor Networks	Mentor	TNSCST (SPS)	0.10	**Completed** (2012)
			Total Amount (in Lakhs)	40.3475	

PATENTS

S. No.	Title of the Patents	Appl./ Design No./Patent No.	Filing Date	Status
1.	Underwater Pollution Tracking Device	339195-001	16/02/2021	**Granted** Jl. No 05/2022 (04/02/2022)
2.	Advanced Soil Suction Mechanism for Borewell Rescue Operations	202041039653/ 526327	14/09/2020	**Granted** (14/03/2024)
3.	Atmospheric Air Filtration Chamber	306729 (Industrial Design)	14/06/2018	**Granted/** Jl.No. 06/2021 (05/02/2021)
4.	Traveller acupressure pedal	306733 (Industrial Design)	14/06/2018	**Granted**/ Jl No. 07/2020 Dated 14/02/2020
5.	Foot rester for traveler	306736	14/06/2018	**Granted/** Jl.No. 06/2021 (05/02/2021)
6.	Acupressure Foot Rejuvenator	306735 (Industrial Design)	14/06/2018	**Granted/** Jl. No. 32/2019 (09/08/2019)
7.	Soil Suction Mechanism for Borewell Rescue	328391-001	19/03/2020	**Granted/** Jl.No. 24/2020 (19/03/2020)
8.	Automation Gadget for Monitoring Fish Pond Water Quality	322650-001 (Industrial Design)	05/11/2021	**Granted/** Jl.No. 45/2021 (05/11/2021)
9.	Mechanical Gripper for Borewell Rescue Machine	327274-001 (Industrial Design)	19/03/2020	**Granted** Jl.No. 91371 (23/09/2020)
10.	Test Chamber for Air Filters	202041043791	08/10/2020	**Granted** (31/12/2021)
11.	Moving Car Pollution Detection Device	347884-001 (Industrial Design)	15/10/2021	**Granted** / Jl No. 42/2021 (15/10/2021)
12.	Pulse Monitor	373575-001		**Granted/**
13.	Digital Signal Reader	408949-001	28/02/2024	Amended
14.	Power Generation using Buoyancy Force through Circular Balls	202441034820	10/05/2024	Published

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S.No	Title	Diary No.	Staus /Registration No.	Date
1.	Design and simulation of ALU using VHDL code	13188/2020-CO/SW	Registered/ SW-13938/2020	02/12/2020
2.	Network security algorithm for nano-biosensors model with optimized bio-cyber communication system for thrombosis prediction	19361/2020-CO/SW	Registered/ SW-14169/2021	11/02/2021
3.	Quantum Computing Algorithm for Cybersecurity and Data Transfer	19994/2022-CO/SW	Registered SW-16261/2023	22-05-2023
4.	MATLAB Algorithm for Simulation of Bio-fluid Flow over an Inclined Surface	6398/2023-CO/SW	Registered/ SW-17527/2023	08-11-2023

CONSULTANCY

S. No.	Name of the Project	Role	Company / Organization	Amount / INR (in Lakhs)	Status
1.	Design and Development of cost effective fish pond automation system along with ammonium, dissolved oxygen etc. sensors	Principal Consultant	thingsTronics Innovation private Limited, Bengaluru	1.18	**Completed**

INNOVATIVE PROTOTYPES

Innovative electronic gadgets have been designed and developed through projects and consultancy and by self for societal applications. These products are granted/filed, copyrighted or transferred technology. Extension process of some of these devices to the interests of the technological and industrial partners is underway. New designs are planned as per the requirements of the customers through industrial partners.

DOCTORAL DEGREES (GUIDED/ONGOING)

S. No.	Name of the Scholar	Title of the Ph.D./Area	Status
1.	D.Saravanan	MANET	**Awarded**
2.	S.Baskar	ECC in WSN	**Awarded**
3.	M.Manoj Prabu	Wireless Body Area Networks	**Awarded**
4.	V.Aarthi	Turbo Coding for WSN	**Awarded**
5.	S. Sivanesan	MANET	**Awarded**
6.	M.G.Sharavana Kumar	Wireless Body Area Networks	**Awarded**
7.	J.Ganesh	Wireless Sensor Networks	**Awarded**
8.	P.Manikanda Prabu	Wireless Sensor Networks	**Confirmation**

POST GRADUATE AND UNDERGRADUATE PROJECTS
- M.E/M.Tech, MCA and M.Sc -34 no completed
- B.Tech IT (Dual degree programme)- 03no completed

PUBLICATIONS IN INTERNATIONAL CONFERENCES

1. Kumar, M. S., & **V.R.Sarma Dhulipala** (2021). Machine Learning Model for Anomaly Detection in Big Data for Health Care Applications. In International Conference on Communication, Computing and Electronics Systems: Proceedings of ICCCES 2020 (Vol. 733, p. 487). Springer Nature.

2. Sivanesh.S, & **V.R.Sarma Dhulipala**, (2019). Comparitive Analysis of Blackhole and Rushing Attack, Int. Conference on Microwave Integrated Circuits, Photonics and Wireless Networks (IMICPW-2019).

3. Ganesh, J., & **V.R.Sarma Dhulipala**. (2019, September). Optimum Energy Based Routing Protocols for Wireless Sensor Network: A Short Review and Analysis. In International Conference on Intelligent Data Communication Technologies and Internet of Things (pp. 381-390). Springer.

4. Syed Kasim.D.,Ganesh.J., & **V.R.Sarma Dhulipala**, (2019). Simulation Studies for Air Pollution Monitoring. International Conference on Atmospheric Chemistry and Physics in Highly Polluted Environments held in IIT Delhi.

5. Baskar. S., & **V.R.Sarma Dhulipala** (2017). Smart Sensor System for monitoring Human Thermal Condition using Montgomery Approach: An Experimental Study., international conference on Nanotechnology: Ideas, Innovations & Initiatives -2017 held in IIT Roorkee.

6. Chander Janapati, R., Balaswamy, C., & **V.R.Sarma Dhulipala**, (2016). Censored Localization for Cooperative WSN using Distributed PSO Algorithm. International Conference on Recent Trends in Engineering Technology and Science (ICRTETS).

7. Prabu, M. M., & **V.R.Sarma Dhulipala**. (2016, January). Acoustic stand-alone wireless sensor system for physically challenged peoples. 10th IEEE International Conference on Intelligent Systems and Control (ISCO), 2016 (pp. 1-5).

8. Hadimani, H. C., Latte, M. V., Tejomurthy, P. H. S., **V.R.Sarma Dhulipala**, & Baskar, S. (2016, February). Optimized mathematical model for cell receivers running in spatially problematic multi path channels for wireless systems in smart antennas. IEEE International Conference on Emerging Trends in Engineering, Technology and Science (ICETETS), (pp. 1-7).

9. Dhanagopu., **V.R.Sarma Dhulipala**, (2014). Transmission Void Aware Pressure Routing for UnderWater Sensor Networks using NS2. International Conference on Futuristic Trends in Electronics Engineering (ICFTEE-2014)

10. Dhananjeyana.G., Chithambararajb.B.,Boseb.A.C., & **V.R.Sarma Dhulipala** (2013). Effect of Ni Doping in Pure H-MoO3, SIWAN-2013at Anna University, Chennai.

11. Arivubrakan.P., **V.R.Sarma Dhulipala** (2012). Energy Consumption Heuristics in Wireless Sensor Networks. International Conference on Computing, Communication and Applications (ICCCA-12).

12. Revathi, G., & **V.R.Sarma Dhulipala** (2012). Smart parking systems and sensors: A survey. IEEE International Conference on Computing, Communication and Applications (ICCCA), 2012 (pp. 1-5).

13. **V.R.Sarma Dhulipala**, Vallimayil, A., Raghunath, K. K., & Chandrasekaran, R. M. (2011) Role of Relay Node in Wireless Sensor Network: A Survey. 3rd International Conference on Electronics Computer Technology.

14. Arulmozhi,K., **V.R.Sarma Dhulipala**, & Prabakaran,R. (2011,April). A Study on Optimized Power Consumption Routing in Wireless Sensor Networks. In Electronics Computer Technology (IECT-2011), 3rd IEEE International Conference on (Vol. 3, pp. 271-274).

15. Karthik, N., & **V.R.Sarma Dhulipala** (2011, April). Trust calculation in wireless sensor networks. 3rd IEEE International Conference on In Electronics Computer Technology (ICECT), 2011 (Vol. 4, pp. 376-380).

16. Prabakaran, N., Raja, B. S., Prabakaran, R., & **V.R.Sarma Dhulipala** (2011, February). Rate optimization scheme for node level congestion in wireless sensor networks. In Devices and Communications (ICDeCom), 2011 International Conference on (pp. 1-5). IEEE.

17. Aarthy , M.M., & **V.R.Sarma Dhulipala** (2011, March). Energy Conservation at Node Level using a Wake-up Scheme in Wireless Sensor Networks. IEEE international Conference on Emerging Trends in Electrical and Computer Technology (ICETECT), 2011.(pp. 1115-1118).

18. Shivakumar ,N., **V.R.Sarma Dhulipala**., Sivakumar ,M., (2011, March). A DFT Study on Mechnano Dynamic Synthesis. International Conference on Advanced Materials (ICAM2011).

19. Pushpa, R. A., Vallimayil, A., & **V.R.Sarma Dhulipala** (2011, April). Impact of mobility models on mobile sensor networks. 3rd IEEE International Conference on in Electronics Computer Technology (ICECT), 2011 (Vol. 4, pp. 102-106).

20. Raja,B. S., Prabakaran, N., & **V.R.Sarma Dhulipala** (2011, February). Modified GPSR based optimal routing Algorithm for reliable communication in WSNs. IEEE International Conference on Devices and Communications (ICDeCom), 2011(pp.1-5).

21. Janani, K., **V.R.Sarma Dhulipala**, & Chandrasekaran, R. M. (2011, February). A WSN based framework for human health monitoring. IEEE International Conference on Devices and Communications (ICDeCom), 2011 (pp. 1-5).

22. Shanmugaraj, M., Prabakaran, R., & **V.R.Sarma Dhulipala** (2011, March). Industrial utilization of wireless sensor networks. IEEE International Conference on In Emerging Trends in Electrical and Computer Technology (ICETECT), 2011 (pp. 887-891).

23. Kumar, K.N., Prabakaran, R., **V.R.Sarma Dhulipala** & Ranjith, P.(2011,January). Future sensors and utilization of sensors in chemical industries with control of environmental hazard. In Proceedings of the 2nd international Conference on Environmental Science and Development (pp. 224-228).

24. Uma B., **V.R.Sarma Dhulipala**,(2011). MAC Vs Routing Protocols in Mobile Ad hoc Network. International Conference on VLSI, Communication & Instrumentation (ICVCI 2011) 08-04-2011.

EDITED BOOKS/BOOK CHAPTERS

1. **Handling Editor,** Frontiers in Sustainable Cities Sustainable Infrastructure (**Edited** Special issue of the journal)

2. **V.R.Sarma Dhulipala**, Tejo Murthy P.H.S., "Proceedings of First International Conference on Recent Trends in Engineering, Technology and Science (ICRETS – 2016) Yazhini Publications., ISBN : 978-93-80622-18-7 (**Edited book**).

3. **V.R.Sarma Dhulipala &** Viswanathan A, "Proceeding of the National Conference on Materials for Sustainable Energy – 2016 (NSMSE'16)", ISBN:978-81-925974-1-5. (**Edited book**)

4. Kanagachidambaresan, G.R., **V.R.Sarma Dhulipala**, D.Vanusha and M.S.Udhaya. "Matlab Based Modelling of Body Sensor Network using ZigBee Protocol" Computational Intelligence and Information Technology (2011): 773-776. (Springer Book Series).

5. **V.R.Sarma Dhulipala**, V.Aarthy, and R.M.Chandrasekaran. "Energy and fault aware management framework for Wireless Sensor Network" Information Processing Management (2010): 461-464. (Springer Book Series)

6. **V.R.Sarma Dhulipala**, B.Vishnu Prabha, and R.M.Chandrasekaran. "Trust worthy Architecture for Mobile Ad Hoc Network Environment" Information Processing and Management (2010): 557-560. (Springer Book Series)

   V.R.Sarma Dhulipala, K.Kavitha, and R.M.Chandrasekaran. "A Cross Layer Approach for Fault Management Framework in Wireless Sensor Networks" Information Processing and Management (2010), 561-564.

8. Aarthy .M, M.Shanmugaraj, and **V.R.Sarma Dhulipala**. "Energy Consumption Analysis of Multicast Routing Protocols in Wireless Ad Hoc Network Environment" Computer Networks and Information Technologies (2011): 412-414.

LABORATORY DEVELOPED

- An *"Interdisciplinary Research Laboratory"* has been inaugurated by the former Vice Chancellor Prof.M.K.Surappa on 07-03-2020 to conduct research in science and engineering (Presently heading the Laboratory).

MoAs

- 02 no of Memoranda of Agreements (MoAs) among IIT Delhi, Anna University, Chennai and Karpagam University, Coimbatore on Intellectual Property Rights for DST funded projects.

- 01 Memoranda of Agreement (MoA) between Anna University, Chennai and Averzs Technologies Pvt Ltd, Chennai for Technology Transfer.

TECHNOLOGY TRANSFER

- The consultancy assignment from thingsTronics Innovation Pvt. Ltd., Bengaluru entitled "Fish pond Automation Gadget – Animisha" has successfully been finished and transferred to M/s Averzs Technologies Pvt. Ltd. Chennai through Anna University. (*First technology transfer from our campus*).

START UP

- Faculty Start-up named "*Han Technologies*" through EDI-ABIRF, AUBIT, Tiruchirappalli (Pre-incubation completed by February, 2022) (*First faculty Start-up from our campus*).

TRANSLATION

- Translated Quantum Mechanics and Strength of materials from English to Telugu through AICTE swayam.

CONFERENCES/WORKSHOPS/SEMINAR ORGANISED

1) Coordinator, one day seminar on "Quality research and funding opportunities: an innovative approach" on 30th March 2023

2) Organizing secretary, IPR awareness programme under NIPAM on 22nd and 24th February 2023.

3) Coordinator, online webinar on "Smart grids: challenges and possible solutions" on 30th May 2020.

4) Coordinator, online webinar on "Analytics of air pollution: Covid 19 pandemic" on 21st May 2020.

5) Publication Coordinator, TEQIP-II sponsored International Conference on Advances in Biological, Chemical and Physical Sciences (ABCPS'2017) joined organized by Depts. of Biotechnology, Chemistry and Physics held at Anna University- BIT Campus, Tiruchirappalli during 13-15 March 2017.

6) Coordinator for TEQIP – II Sponsored two day national Workshop on "Optoelectronics and Advanced Materials", Department of Physics, Anna University, BIT Campus, Tiruchirappalli.

7) Co-Coordinator for TEQIP – II Sponsored two day national seminar on "Advances in Engineering Materials" Department of Physics, Anna University, BIT Campus, Tiruchirappalli.

8) Represented Anna University Tiruchirappalli for First Science Conclave of Nobel Laureates held at IIIT, Allahabad in Dec, 2008.

9) Co-Coordinator for one day workshop on "Mobile and Wireless Sensor Networks" on 8th Feb, 2009 at Center for Convergence of Technologies (CCT), Anna University, Tiruchirappalli.

10) Organizing secretary for a two day workshop on Pervasive Computing Technologies at Anna University, Tiruchirappalli on 21.02.1011 & 22.2.2011.

11) Joint-Organizing secretary for HEAT workshop organized by Department of Physics, Anna University, Tiruchirappalli.

12) Organizing Committee Member of "Mini Colloquium on Nanofabrication Technologies" Organized by Division of Nano science and Technology, Anna University, BIT Campus, Tiruchirappalli.

CONFERENCES/WORKSHOPS/SEMINAR/SHORT TERM COURSES ATTENDED

1) Online 5-day FDP on "Including Universal Human Values in Technical Education" by AICTE during 15-19 November 2021.

2) "Industrial Training on Plastics Testing and Quality Control (online)", Conducted by CIPET-CSTS, Madurai during 06-22 September 2021.

3) International webinar on "Exercise Medicine to Resurgence COVID pandemic" conducted by AUBIT on 15 August 2021.

4) Online webinar on "Experiences on Faculty Innovation and Enterpreneurship" by EDII-ABIRF on 24-05-2021.

5) One week Short term"Yoga Practices for Physical an Mental Health Management" conducted by Mother Teresa Women University, Kodaikkanal during 17-22 May 2021.

6) Technology Exhibition 2020 Cum Training Program held at Anna University, Chennai during 27-29Th February 2020.

7) One day Orientation & PFMS Programme for progarmme officers held at Anna University Regional Campus, Tiruchirappalli on 26th October 2018.

8) One-Day Orientation Programme for NSS Programme Officers and Student Volunteer Secretaries held at Anna University Regional office, Tiruchirappalli on 16th September 2017.

9) Smart Grids R&D Conclave at Indian Institute of Technology, Delhi organized by DST, Govt. of India on 27 August 2018.

10) Interaction meeting on Technology Solutions for Mitigating Air Pollution and related R&D issues held on 28th December 2017 at Department of Science and Technology (DST), Technology Bhavan, New Delhi.

11) Mission Innovation Challenge #1: Smart Grids Workshop-cum-Exhibition held on 18th November 2017 at IIT Delhi organized by Department of Science and Technology (DST).

12) Two days "Symposium on Teaching Learning in Higher Technical Education" during 22-23 January 2016 organized by Teaching Learning Centre, IIT, Madras and SPFU Tamil Nadu.

13) TEQIP-II Sponsored 3-Day Residential Programme in Essentials of Embedded Systems and their Applications at Gem Park Hotel, Ooty from 5.3.2014 – 7.3.2014.

14) One Day Workshop on R & D Proposals conducted by CTDT, Anna University, Chennai on 28.06.2013.

15) 3-Week refresher courses on "VLSI design and Embedded systems" Sponsored by UGC at ASC, JNT University, Hyderabad in Nov-Dec, 2004.

16) Short term course on "Embedded Systems and Technology" at IIT, Kharagpur in April, 2005.

17) UGC sponsored 78th Orientation programme from 1.2.2013 to 28.02.2013 at UGC Academic Staff College, Bharathidasan University, Tiruchirappalli.

18) National Space Science Symposium, NSSS-2006 sponsored by ISRO at Andhra University, Visakhapatnam in February, 2006.

19) Short term training program on "8051 Microcontroller" at MVGR College of Engineering, Vizianagaram in May, 2006.

20) Quality Improvement Program on "Instructional Design and Delivery" conducted by NITTTR, Ministry of HR at MVGR College of Engineering, Vizianagaram in June, 2006.

21) Workshop on "Mixed Signal Processing and Recent Advances in Electronics" conducted by USIC, Andhra University in Nov, 2006.

22) Faculty interaction meet on "Keeping Pace with Advanced Technology" conducted by IGIAT at Visakhapatnam in Nov, 2006.

23) Orientation course on "Internet Technologies" Sponsored by UGC at ASC, JNT University, Hyderabad in Jan, 2007.

24) Workshop on "Low Power VLSI Design" conducted by USIC, Andhra University in Feb, 2007.

25) 3 Days workshop on "Service Oriented Architecture" conducted by Anna University, Tiruchirappalli.

26) One day workshop on "NS-2 Network Simulator" conducted by Anna University, Tiruchirappalli.

27) One day workshop on "Fault Tolerant Systems" conducted by National Institute of Technology, Tiruchirappalli.

INVITED LECTURES:

1) Invited talk and demonstration on "patented home appliances for societal cause' at SRC-Sastra, Kumbakonam on 04-04-2023.

2) Invited Lecture on "Recent Contributions in Science-It's your turn", at SRC-Sastra, Kumbakonam on 28-02-2023.

3) Invited talk and Jury for Science exhibition at Sri Chaitanya School, Trichy on 28-02-2023.

4) Invited webinar talk on "Device Applications of Photonics" on 07-02-2023, Bharathi Engineering College for Women, Pudukkottai.

5) Jury, National level technical symposium at Paavai College of Engineering on 29 September 2022.

6) Invited talk on "Art of writing research proposals" for Nehru Institute of Technology, Coimbatore on 29 July 2022.

7) Special online talk on "Nitty Gritty on Novel paradigms in Computer Engineering : Future Perspective" for SASTRA Deemed University, Kumbakonam on 30 October 2021.

8) Key note speaker for online webinar titled "IoT based monitoring Systems" conducted by IEEE Information Theory Society, Bangalore Chapter on 22 May 2021.

9) Invited webinar talk on Communications in Sensor Networks: A Nitty-gritty", KL University, Vijayawada on 19 June 2020.

10) Invited webinar talk on "Challenges and Possible Solutions in Ad Hoc Networks: A Research Perspective" for Miracle Educational Society Group of Institutions, Visakhapatnam on 15 May 2020.

11) A talk on "An Integration of On Site Demand Management in Smart Energy Meter Using LoPWAN IoT" for Awareness Raising an Networking Event EU-India call conducted by Dept of Science and Technology at IIT Delhi on 31 October 2019.

12) Invited talk on "Recent trends in Wireless Sensor Networks" in International conference on "Advanced communication technologies" (ICACT-2019) at SIR C.R.Reddy College of Engineering on 26th and 27th April 2019.

13) Invited speaker on " Derive future with Biosensor and Bioelectronics" on 08-03-2019 in International Seminar at M.I.E.T Engineering College, Tiruchirappalli.

14) Key note speaker for CSID sponsored one day National seminar on "Artificial Neural Network for Solving Medical Diagnosis problems on 06-02-2019 at N.S.N College of Engineering and Technology, Karur.

15) TEQIP-III Sponsored expert talk on "Electrical Vehicle Charging using IoT: Computing Challenges and Possible Solutions" in (CCPVS-2018) from 11-13 May 2018 at Dept of Electrical Engineering, Andhra University College of Engineering, Andhra University, Visakhapatnam.

16) Chief Chair of Conference on 23 March 2018 for National Conference on Computing and Communication in Emerging Technologies (NCCCET'18), Chettinad College of Engineering and Technology, Karur.

17) Resource person for ISRO sponsored Two days seminar on "Research Focus on Nano-Satellite Technology & Its applications" organized by the Dept of ECE, Pavai College of Technology, Namakkal on 17-03-2017.

18) Invited lecture for the one day workshop on "Research Methodology and Statistical Tools for Research" on 25 February, 2017 at Kings College of Engineering, Tanjore.

19) TEQIP – II Sponsored Expert Talks on Paradigms of Computing, Modeling and Simulation at Anna University, BIT Campus, Tiruchirappalli.16-06-2016.

20) Resource Person for the topic titled "Heuristic design approaches and algorithms for Wireless sensor network applications" in TEQIP II sponsored Faculty Development Programme on Engineering Mathematics through Applications (EMTA 2016) organized by Dept of Mathematics, PSG College of Technology, Coimbatore on 04-07-2016.

21) Delivered a keynote speech on "Issues in Interdisciplinary Research" at Two Day International Conference on "Recent Trends in Engineering Technology and Science" conducted by STJ Institute of Technology, Haveri, Karnataka on 12-13 August 2016.

22) Technical lecture on "Research Issues in Wireless Sensor Networks" on 16-06-2016 in TEQIP-II sponsored faculty development programme on "Heuristic Approach for Information and Communication Engineering Research Problems" organized by Dept of ECE, Anna University-BIT Campus, Tiruchirappalli.

23) Keynote speech on "Wireless sensor networks (WSN) and its Applications" from 06-07 May 2016 organized by Dept of ECE, Govt. Engineering College, Haveri, Karnataka.

24) Chari person for IEEE sponsored "International conference on Emerging Trends in Engineering, Technology and Science (ICETETS-2016) on 26-02-2016.

25) Keynote Speaker in International workshop on "Research Issues in Pervasive Computing" for the DST sponsored Two days International workshop on "Recent Trends in Computing and Information" at N.S.N.College of Engineering and Techology, Karur on 25-02-2016.

26) Chief Guest and Judge for the paper presentation for one day symposium "INTES 2K15" organized by Dept of ECE, SCAD Engineering College, Tirunelveli on 25-02-2015.

27) Invited lecture in the seminar on "Art of Writing a Paper" on 30-01-2015 at Kings College of Engineering, Thanjore.

28) Invited lecture on "Embedded Computing – Essentials" at Kings College of Engineering, Punalkulam, Thanjore.

29) Invited talk on "Sensor Networks – a New Sense of Communication" NSROM – 2013 conducted by Department of IT and CSE, Bharthiar University, Coimbatore, Tamil Nadu on 06th December 2013.

30) Invited Lecture on "Modern Technology" organized by Dept of ECE, Arasu Engineering College, Kumbakonam on 04-10-2013.

31) Invited Expert Lecture on "Network Simulators" conducted by Department of CSE, SASTRA, Kumbakonam, Tamil Nadu.

32) Invited Lecture on "Pervasive Computing – Sensor Networks Perspective" for AICTE sponsored workshop on pervasive computing technologies at Kings College of Engineering, Punalkulam, Thanjore on 26.04.2013.

33) Judge and Chief guest for National Conference on "Recent Trends in Computer Science" at Shri Angalamman College of Engineering and Technology on 19.02.2010.

34) Judge for a National level Conference at St. Joseph College of Engineering, Tanjore

35) Expert Lecture in "Wireless/Satellite Communication" for AICTE Sponsored SDP on Wireless Communication, Srinivasa Polytechnic College on 18.12.2009, Tiruchirappalli, Tamilnadu.

36) Session Judge for a National Conference on "A Mobile/Wireless Network" at Pavendar Bharathidasan College of Engineering and Technology on 3.4.2009.

OUTREACH ACTIVITIES

- **Project Reviewer,** Science and Engineering Research Board (SERB).
- **Member, Governing Council,** Study world college of Engineering, Coimbatore.
- **Member, Governing Council,** Nehru Institute of Technology, Coimbatore.
- **Review Editor,** Climate Changes and cities, Frontiers.
- **Empanelled expert**, Bharat Heavy Electrical Limited (BHEL), India.
- **Member of Research Advisory Board,** Karpagam University, Coimbatore.
- **Member, BoG,** NSN College of Engineering and Technology, Karuru.
- **Special issue Guest Editor** for the Special issue titled "*Communication and Health Monitoring based Modeling and Simulation using Wireless Sensor Networks*" in ICTACT Journal of Communication Technology, March 2015.
- **International Advisory Board Member** for "International Journal of Wireless Broadband Network Technologies", IGI Global.
- **Editorial Board Member** for "*Journal of Communications Engineering and Networks*".
- **Reviewer** for Taylor & Francis "Automatika"
- **Reviewer** for Defense Science Journal **(DSJ).**
- **Reviewer** for IEEE Sensors Journal, IEEE Access, IEEE Communications Surveys and Tutorials, IEEE Transactions on Industrial Informatics, IEEE Access.
- **Reviewer** for International Journal of Information and Communication Technologies by Inderscience.
- **International Programme Committee member** for ICACCI – 2013 Reviewer for Elsevier's Journal of Systems and Software, Computer networks, ad hoc networks, computer communication, Pervasive and Mobile Computing etc.,
- **Reviewer** for Ad hoc Wireless Sensor Networks, Old City Publishing House.
- **Reviewer** for a Springer Journal of Wireless Personal Communications.
- **Reviewer** for Springer Journal of Zhejiang University of Computer Science and Electronics.
- **Editorial Member** for "*International Journal of Computer Networks*" (IJCN) by ACEEEE (US Division) from 2009-2012.
- Ph.D Oral Examination Board member for conduct of viva-voce, Anna University, Chennai.
- Ph.D Doctoral Committee member for Vels University.

ADDITIONAL RESPONSIBILITIES / POSITIONS HELD IN UCE-BIT CAMPUS:

- *Coordinator* **(Patents, Consultancy and Fellowships)** since February 2023 to till date.
- *Member***,** Anti-ragging Committee since February 2023 to till date.
- *Chief Superintendant***,** Anna University examinations during November 2019.
- *NSS Programme Officer*, Anna University, BIT Campus from 2016 to September 2022.
- *Deputy Warden* (Hostels), **Indian Institute of Information Technology (IIIT), Srirangam** from August 2015 to October 2015. (Anna University was the host Institution during the mentioned period)
- *Physical Stock Verification Officer*, (erstwhile) Anna University of Technology, Tiruchirappalli during March 2011.
- *Research team member*, Centre for Convergence of Technologies (CCT), (erstwhile) Anna University, Tiruchirappalli from 31-10-2007 to 01-08-2012.

PROFESSIONAL MEMBERSHIP

Life Member in the following societies/associations:

- IPA (Indian Physics Association) : LM/13225

AWARDS AND HONOURS

- *Best NSS Programme Officer* (University level) award from Anna University (2020-21)

- **"*Tech Samaritan*"** by IEI-Tiruchirappalli Local chapter**,** 2021

- *Primary Evaluator* for Toycathon, 2021, conducted by Ministry of Education, Govt. of India.