



# SRM Valliammai Engineering College (Autonomous Institution)

SRM Nagar, Kattankulathur-603203, Chengalpattu District, Tamil Nadu  
TEL : 044 - 27454784 / 726, FAX : 044 - 27451504

## Department of **Electronics & Communication** Engineering

### Personal Details

<b>Name :</b>	Dr. C.AMALI	
<b>Designation :</b>	Asst. Prof (Sel.G)	
<b>Educational Qualification :</b>	M.E., Ph.D.,	
<b>Experience:</b>	20 Years 10 Months	
<b>Area of Specialization :</b>	Wireless Networks	
<b>Date of Joining :</b>	18/06/2008	
<b>Email ID :</b>	<a href="mailto:amalic.ece@valliammai.co.in">amalic.ece@valliammai.co.in</a> <a href="mailto:amali.vec@gmail.com">amali.vec@gmail.com</a>	
<b>Contact Numbers :</b>	9444324425	

### Educational Details

S.No	Degree	Branch/Specialization	Institution / University	Year
1	UG	B. E., Electronics & communication	Govt.College of Technology, Bharathiyar University	1997
2	PG	M.E., Applied Electronics	College of Engg., Anna University	2007
3	Ph.D.,	Wireless Networks	SRM University, kattankulathur.	2016

### Professional Society Memberships

1. Institute of Electronics and Telecommunication Engineers
2. Indian Society of Technical Education
3. Computer Society of India
4. IAENG International Association of Engineers
5. International Society for Research and Development
6. Indian Science Congress
7. Institute for Exploring Advances in Engineering

## Publication Details

### Journals:

1. N. Kanniyappan, C. **Amali**, “Design Of Substrate Integrated Waveguide Bandpass Filter For 5G Applications”, Journal of the Balkan Tribological Association, Vol. 27, No 3, pp:31–4, 2021. **Scopus Index]**
2. Elayaraja.C, Amali.C ,Kannan.S, B.Sridhar,“Energy Efficient Design of EHF-5G Antennas with Enhanced Bandwidth for Navigation Satellite Applications ”, 3C Tecnología. ISSN: 2254 – 4143, pp:537- 551, Nov. 2021 [**Web of Science]**
3. Lavanya Sruthi M, Madhumitha P, Ajith Kumar V,Amali C ,“Deployment of Wearable Sensors For Patient Monitoring System Using Augmented Reality And IoT”, International Research Journal of Engineering and Technology, 8(4), pp:516-520, April 2021.
4. Krishnakumar C, Muralidharan. K, Karthick. V, C.Amali,“Monitoring and Detection Of Health Safety In The Locked Car Using Smart Arduino System”, 8(3), pp: 2878 -2882, April 2021.
5. D.Sridevi , V.Vijayalakshmi, ,C. Amali ,K. Guru, ,“SOT based Dynamic Garbage Management System”, Ilkogretim Online - Elementary Education Online, Vol 20 (Issue 5): pp. 2207-2214, 2021
6. **C. Amali** , K. Guru, D.Sridevi,“IoT Based Smart Logistics Management System Using GPS and GSM”, International Journal of Advanced Research in Engineering and Technology,11(12) , pp. 3035-3041,Dec.2020,
7. Mohan S JananisriM,Naveen Raj V,**C. Amali**,“RF Powered ID Sensor Based Activity Recognition System For Alerting Bedridden People”, International Journal Of Creative Research Thoughts, 8(3), pp.124-128, March 2020.
8. Thirumurugachandar.M, Suvetha.S,Sankari.M, **C. Amali**, “Efficient energy harvesting and Reusing system”, International Research Journal Of Engineering and Technology, 7(3), pp.2364-2368, March 2020.
9. C.Amali, DhanasreeJayaprakash and B.Ramachandran(2017), “ AnAnalytical Solution Based on Mobility and Multicriteria Optimization For Access Selection in Heterogeneous Environment,” **Indian Academy of Sciences, Sadhana, Springer** Publisher, 42(11), pp. 1871–1882, November 2017.[**Science Citation Index]**
10. C. Elayarajaand C.Amali, (2020), “A Comprehensive Realization of Resource Spread Multiple Access / NOMA performances in 5G,” **International Journal of Innovative Technology and Exploring Engineering**, 9(4),pp:949-954. [**Scopus Index]**
11. N.Kanniyappan and C.Amali, (2019),”Design And Development Of Microstrip Resonator For Wireless Applications,” i-manager’s **Journal on Wireless Communication Networks**, 8 1(2) pp.29-33.
12. M. Ishwarya, G. Kavitha, S. Kowsalya, **C. Amali**, “Emergency Vehicle Pre-Emption Using Smart City Concept”, International Research Journal Of Engineering And Technology, 6(3), pp.2167-2171, March 2019.
13. Abisheik.T, BanuPriya.S, Avinash R,**C. Amali**, “Automated Targeting System For Open Space Military Area”, International Research Journal Of Engineering and Technology,6(3), pp.3520 – 3523, March 2019.
14. C.Amali, and B.Ramachandran (2018), “Enabling Key Technologies and Emerging Research Challenges Ahead of 5G Networks: An Extensive Survey,” **International Journal On Informatics Visualization**, 2(3),pp.133-146. [**Scopus Index]**
15. C.Amali, and B.Ramachandran (2016), “Complexity – Consistency Trade off in Multi - Attribute Decision Making for Vertical Handover in Heterogeneous Wireless Networks,” **IET Networks**, 5(1), pp.13-21.[**Scopus Index]**

16. C.Amali, DhanasreeJayaprakash and B.Ramachandran (2014), "Enhanced Media Independent Network Selection For Heterogeneous Wireless Networks," **IETE Technical Review**, 31(5), pp.392-401. [**Science Citation Index**]
17. Niwaz.P.M,Kaleeswaran.M, Prabhu.C.A, Mohamed Raseem.A, Amali.C (2018), "Smart Automobile Air Pollution Monitoring Assistance Using Fuzzy Logic," *Int. J. of Advance Research in Science and Engineering* , 7(2), pp.183-193, March 2018.
18. C.Amali(2018), "Anti-Smuggling Unit for Forest Monitoring using WSN," *Int. J. for Scientific Research and Development*, 6(3), May 2018.
19. B.Shiny and C.Amali (2017),"Energy Efficient Power Optimization for Fading Cognitive Radio Channels Based on Convex Optimization Techniques," *International Journal of Trend in Research and Development*, 4(2),pp.278-283.
20. B.Shiny and C.Amali (2017), "Clustering Based Resource Allocation For OFDM Based Cognitive Radio Networks," *International Journal of Recent Scientific Research Research*, 8(6), pp. 17469-17474.
21. Parvathi.S, and Amali.C,(2016), "Distributed and dynamic routing control using virtualized local area network," *IOSR Journal of electronics and communication engineering*,ISSN:2278-2834,pp.1-9.
22. Pavithra.R, and Amali.C (2016), "Analyzing the Signal Flow and RF Planning in GSM Network," *Int. J. of Advanced Engineering and Global Technology*,"4(3),pp.1981-1983.
23. Parvathi.S, and Amali.C (2016), "QoS improvement using secured neighbor discovery protocol," *Int. J. of Advanced Engineering and Global Technology*," 4(3), pp.1989-1996.
24. G.Kaviya, and C. Amali,(2015) "Channel estimation for TFT-OFDM systems under long delay channels," **International Journal of Applied engineering research**, 10(9), pp.8439-8444, 2015.
25. A.Manokar, and C.Amali, (2015), "Probabilistic Analysis of Network Selection Strategy for Heterogeneous Wireless Network," **International Journal of Scientific & Engineering Research**, 6(3), pp.792-797.
26. C.Amali, DhanasreeJayaprakash and B.Ramachandran (2014), "Optimized Network Selection Using Aggregate Utility Function in Heterogeneous Wireless Networks," **International Review on Computers and Software**, 9(7), pp. 1293-1301.
27. C.Amali, Bibin Mathew and B. Ramachandran, (2013), "Intelligent Network Selection using Fuzzy Logic for 4G Wireless Networks," **International Journal of Electronics and Communication Engineering & Technology**, 2 (2), pp.451-461.

#### Conferences:

1. C.Elayaraja, and C.Amali, "Enactment on Uplink and Downlink: MIMO - NOMA for 5G", *International Conference on Recent Emerging Science, Engineering & Advanced Research in Communication and Healthcare-2021 (ICRESEARCH-2021)*, June 4th & 5th 2021, pp:272-281.
2. R.Ganesh Babu,V.Vijey Nathan, J.Bino, C.Amali, "IoT Security Enhancement with Automated Identification Device using IOT SENTINEL", *IEEE 11th International Conference on Cloud Computing, Data Science & Engineering (Confluence 2021)*, 517 – 522, 2021
3. C.Elayaraja, Dr.C. Amali, "A Survey on NOMA Transmission Signalling Schemes for Interference Management in 5G", *International Conference on Smart Automation in Computer, Electrical, Electronics And Communication Engineering*, SRMVEC, Chennai, September 6-7, 2019.
4. C.Elayaraja, Dr.C.Amali, Dr.B.Sridhar, S.Kannan, "Energy Efficient Design of EHF-5G Antennas with Enhanced Bandwidth for Navigation Satellite Applications", *International Conference on "Kalasalingam Global Conference"*, School Of Electronics And Electrical Technology (SEET), KGC , 18-20 December,2019.
5. Niwaz.P.M,Kaleeswaran.M, Prabhu.C.A, Mohamed Raseem.A, Amali.C (2018), "Smart Automobile Air Pollution Monitoring Assistance Using Fuzzy Logic," *Proc. International Conference on advancements in Engineering , Technology and sciences*, Dhaanish Ahmed College of Engineering, Chennai, pp.206-216.

6. C.Amali, Abdul. K, Aravindan.K, Arjun.R,Goutham.A (2017), “Emergency Assist Device for Locating Double B In Air Plane System, Proc. International Conference on Emerging Innovation in Engineering and Technology, Christ Institute of Technology, Villianur, *Puducherry*, pp.43-48.
7. B.Shiny and C.Amali(2017), “Uplink Resource Power Optimization For Fading Cognitive Radio Channels Based On Convex Optimization Techniques,” Proc. International Conference on Electrical, Communication and Computing, Tagore Engineering College, Chennai, pp.1-7.
8. Pavithra.R, and Amali.C (2016), “Analyzing the Signal Flow and RF Planning in GSM Network,” Proc. 5th National Conference on Communication Information & Telematics, Coimbatore, India, pp.15-17.
9. J.Shankar, C.Amali, and B. Ramachandran, (2014), “Combined Utility and Adaptive Residence Time-Based Network Selection for 4G Wireless Networks”, Proc. 3rd International Conference on Multimedia Technology, Guangzhou, China.(Lecture Notes in Electrical Engineering 278, pp 11-24, **Springer-Verlag Berlin Heidelberg**.)
10. C.Amali, and B. Ramachandran, (2012), “Modified Weight Function Based Network Selection Algorithm for 4G Wireless Networks, Proc. **ACM International Conference** on Advances in Computing, Communication and Informatics, Chennai, India, pp. 292-299.

### Research and Development Details

#### 1. *No. of Research Projects Applied : 5*

- Submitted the proposal on “**National Seminar on Emerging Trends and Research Directions in 5G Networks from Social Perspective**” to SERB with file no. SSY/2017/001438
- Submitted the project proposal entitled “**Analysis and assessment of Smartainability of cities: An Integrated Framework**” to DST with file no.TPN / 11948.
- Submitted the project proposal entitled **Wearable FSS Based Fall Detection and Prevention System For Elderly and People with Disabilities**” SERB- SUPRA
- Submitted the project proposal entitled “**Towards Smart City: AI based Covid -19 Waste Disposal Monitoring System for Urban Environment**” DST with TPN / 59465
- Submitted Research Promotion scheme entitled **Software defined radio assisted smart device to device communication network for fast and seamless wireless connectivity – Approach on e-health services**” AICTE- AQIS 1-9290753511

#### 2. *No. of Patents Filed: 1*

- IoT BASED SMART WEARABLE CHILD AND WOMEN’S SAFETY DEVICE.  
Ref.No-202041049152A, 13.11.2020.

#### 3. *No. of Ph.D candidates guided/guiding: 5*

Centre for Research, Anna University, Chennai recognized as a Supervisor (Ref. No:2840069) for guiding Ph.D. and M.S.(By Research) scholars of this university under the Faculty of Information & Communication Engineering in the field of wireless communication, Wireless networks and resource management.

#### 4. *No of Conferences Convened: 1*

National Conference On “Microwave and Millimeterwave Communication” on 21<sup>st</sup> March 2019

## Other Particulars

*1. No. of STTP/FDP coordinated: 3*

*2. Reviewer in IET Networks*

*3. Resource Person:*

- Delivered a session in Faculty Development Programme on “Signal Processing Systems & Optical Communication” on 19.05.2021 conducted by the Department of ECE, SRMVEC.
- Delivered a lecture on “Op-Amp Based Data Converters & Special Function IC’s” organized by Department of ECE, Loyola Institute of Technology on 1st June 2021.
- Delivered a session on Adhoc and Wireless Sensor Networks organized by Department of ECE, Narasu’s Sarathy Institute of Technology, on 01.10.2021.