


**PERSONAL DETAILS AND AFFILIATION**

<b>Name of the Faculty Member</b>	<b>Dr.C.Balamurugan</b>	
Designation	Associate Professor	
Department	Electronics and Communication Engineering	
Date of joining the institution	19.05.2008	
Address for Communication	Department of ECE, National Engineering College, K.R. Nagar, Kovilpatti-628 503	
Email ID/webpage	<a href="mailto:balamurugan@nec.edu.in">balamurugan@nec.edu.in</a> <a href="mailto:bala.me08@gmail.com">bala.me08@gmail.com</a> ORCID Webpage: <a href="https://orcid.org/0000-0001-5316-594X">https://orcid.org/0000-0001-5316-594X</a> Scopus Webpage : <a href="https://www.scopus.com/authid/detail.uri?authorId=57095145100">https://www.scopus.com/authid/detail.uri?authorId=57095145100</a> GoogleScholar : <a href="https://scholar.google.com/citations?user=vKmkJn4AAAAJ&amp;hl=en&amp;authuser=1">https://scholar.google.com/citations?user=vKmkJn4AAAAJ&amp;hl=en&amp;authuser=1</a>	

**EDUCATIONAL QUALIFICATION**

<b>S.NO.</b>	<b>QUALIFICATION</b>	<b>INSTITUTION STUDIED</b>	<b>UNIVERSITY / BOARD</b>	<b>YEAR OF PASSING</b>
1	SSLC	Govt. Hr. Sec. School	State Board	2000
2	HSC	Govt. Hr. Sec. School	State Board	2002
3	B.E. (ECE)	PSR Engineering College	Anna University	2006
4	M.E./M.Tech.	National Engineering College	Anna University	2008
5	Ph.D.	College of Engineering, Guindy	Anna University	2022

TEACHING EXPERIENCE						
S.NO.	NAME OF THE INSTITUTION / ORGANIZATION	POSITION HELD	FROM	TO	EXPERIENCE	
					Y	M
1.	National Engineering College	Associate Professor	03.05.2023	Till date	2	11
2.	National Engineering College	Assistant Professor (SG)	10.07.2013	31.05.2023	09	10
3.	National Engineering College	Assistant Professor	1.11.2011	09.07.2013	1	7
4.	National Engineering College	Lecturer	19.05.2008	31.10.2011	3	5
<b>TOTAL EXPERIENCE</b>					<b>17</b>	<b>9</b>

PH.D SCHOLAR DETAILS				
NAME OF THE RESEARCH SCHOLAR	MODE OF RESEARCH	INSTITUTION	UNIVERSITY	Status
R.Ganesh	Part time	Unnamalai Institute of Technology	Anna University Chennai	<i>Course Work</i>
Mrs.S.Muguntha Mala	Part time	NEC, K.R.Nagar, Kovilpatti	Anna University Chennai	Course work
Mrs.D.Yamini	Part time	SCAD College of Engineering	Anna University Chennai	<i>Course Work</i>
Mrs.K.Poorani	Part time	NEC, K.R.Nagar, Kovilpatti	Anna University Chennai	Course work
Mr. James Nesaratnam	Part time	Grace College of Engg, Tuticorin	Anna University Chennai	Course work

PATENT GRANTED				
S.N O.	TITLE OF THE INVENTION	NAME OF INVENTOR	APPLICATION No	PUBLIC ATION DATE
1	AN APPARATUS FOR INJECTING PLANT GERMINATING MEMBERS	1. Sivaramakrishnan S R 2. Prakash G 3. Dinesh Jefferson E 4. Nissan Prabhu N 5. Mohamed Meeran S 6. <b>C.Balamurugan</b> 7. P.Hariharasakthisuudthan	202141060653	28.03.2024
2	IoT based drip bottle level indication system	1.Melchisedec Samuel P 2.Stephen S Billigraham 3.Aasif Mohammed M B 4.Sudhakar J 5. <b>C.Balamurugan</b> 6.F.Michael Thomas Rex	202241007608	06.05.2024

LIST OF SCI/SCOPUS JOURNAL PUBLICATIONS	
1.	<b>C.Balamurugan</b> , Dr.P.Marichamy, Dr.R.Harichadran Effect of h-BN Nanoceramic Substrate on the performance of patch antenna in S-Band applications, International Journal of RF and Microwave Computer-Aided Engineering (Feb-2020) ( <b>SCI indexed -impact factor 1.467</b> ) DOI: 10.1002/mmce.22098

2.	<b>C.Balamurugan</b> , Dr.P.Marichamy. Multiband Microstrip patch antenna for X band and C band applications. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields (May- 2021) ( <b>SCI-indexed- impact factor – 0.833</b> )
3.	<b>C.Balamurugan</b> , Dr.P.Marichamy, Dr.R.Harichadran. Performance Comparison of Microstrip Patch Antenna Using h-BN Nanoceramic Substrate and FR4 Substrate. Wireless Personal Communication (June-2021) ( <b>SCI indexed -impact factor 1.061</b> )
4.	<b>C.Balamurugan</b> , Dr.P.Marichamy, Dr.T.S.Arun Samuel. Design and Fabrication of Compact Triangular Multiband Microstrip Patch Antenna for C and X Band Applications. International Journal of Communication systems. DOI: <a href="https://doi.org/10.1002/dac.4939">https://doi.org/10.1002/dac.4939</a> (Aug-2021) ( <b>SCI indexed -impact factor 2.047</b> )
5.	<b>C.Balamurugan</b> , T.S.Arun Samuel, Merlin Gilbert et al. Enhancing gain and bandwidth in a multiband microstrip patch antenna through L-slot and partial ground plane integration. Sci Rep 15, 29083 (2025). <a href="https://doi.org/10.1038/s41598-025-13947-8">https://doi.org/10.1038/s41598-025-13947-8</a> ( <b>SCI indexed -impact factor 3.9</b> )
6.	Kumar, J.D. <b>Balamurugan C</b> . Performance Measures of Filter Bank Multi-Carrier Waveform for 5G Communication, International Journal of Engineering Trends and Technology, 2019, DOI: <a href="https://doi.org/10.14445/22315381/IJETT-V67I1P205">10.14445/22315381/IJETT-V67I1P205</a>
7.	C Balamurugan, P Marichamy, Circular Ring-based Microstrip Patch Antenna for harvesting the RF Signal at Wi-Fi Frequency Band, Solid State Technology, 63 (6), 12562-12570
8.	Mariselvi Kailasam, TS Arun Samuel, <b>C Balamurugan</b> , M Navaneetha Velammal. Design and Development of Wearable Microstrip Patch Antenna for ISM Application, Congress on Intelligent Systems , CIS 2024, Volume 2 1276, 293
9.	K Kaviya, L Keerthana, KS Shrini, C Balamurugan, Enhanced Gain and Bandwidth by using Hybrid Dielectric Resonator Antenna, Sustainable Materials and Technologies in VLSI and Information Processing (2025)
10.	C Balamurugan, SP Mary, TSA Samuel, EM Kumaran, A Compact Wearable Slots and Slit-Based Patch Antenna for Biomedical Application, Sustainable Materials and Technologies in VLSI and Information Processing, 57-63 (2025)

11.	Krishna Kumar M; Beno A; Pricilla Mary S; <b>Balamurugan C</b> , "Compact Bandwidth-Enhanced Honeycomb Fractal Antenna for Next-Gen Wireless and Radar Applications," 2025 IEEE Wireless Antenna and Microwave Symposium (WAMS), Chennai, India, 2025, pp. 1-5, doi: 10.1109/WAMS64402.2025.11157929.
12.	<b>C. Balamurugan</b> , Harihara Sudhan A; Rithish Kumar S; Madhan Kirubaharan G, "Design and Simulation of a Rectenna for RF Energy Harvesting in the S-Band," 2025 International Conference on Intelligent Innovations in Engineering and Technology (ICIET), Coimbatore, India, 2025, pp. 1-6, doi: 10.1109/ICIET65921.2025.11379263.

#### LIST OF INTERNATIONAL CONFERENCE PUBLICATIONS

1.	Krishna Kumar M; Beno A; Pricilla Mary S; <b>Balamurugan C</b> , "Compact Bandwidth-Enhanced Honeycomb Fractal Antenna for Next-Gen Wireless and Radar Applications," 2025 IEEE Wireless Antenna and Microwave Symposium (WAMS), Chennai, India, 2025, pp. 1-5, doi: 10.1109/WAMS64402.2025.11157929.
2.	<b>C.Balamurugan</b> , S.Pricilla Mary, <b>T.S.Arun Samuel</b> and E.Muthukumuran, "A COMPACT WEARABLE SLOTS AND SLIT BASED PATCH ANTENNA FOR BIOMEDICAL APPLICATION", International Conference on Sustainable Materials and Technologies in VLSI and Information Processing (DECEMBER 13-14, 2024), Kalasalingam Academy of Research and Education, Krishnankoil. Publication Partner- <b>CRC Press (Taylor &amp; Francis Group- Scopus indexed)</b> .
3.	Mariselvi Kailasam, T.S. Arun Samuel, <b>C.Balamurugan</b> and M.Navaneetha Velammal, "DESIGN AND DEVELOPMENT OF WEARABLE MICROSTRIP PATCH ANTENNA FOR ISM APPLICATION", 5th Congress on Intelligent Systems (CIS 2024), CHRIST (Deemed to be University), Bengaluru, India, September 2024.
4.	K, Kaviya, L. Keerthana K. Subiksha Shrini, <b>C. Balamurugan</b> , Enhanced Gain and Bandwidth by using Hybrid Dielectric Resonator Antenna, International Conference on Sustainable Materials and Technologies in VLSI and Information Processing (DECEMBER 13-14, 2024), Kalasalingam Academy of Research and Education, Krishnankoil. Publication Partner- <b>CRC Press (Taylor &amp; Francis Group- Scopus indexed)</b> .
5.	<b>Balamurugan C</b> , "Wideband Microstrip Patch Antenna using Graphene Nano Conducting materials for C band Wireless Applications", 8 <sup>th</sup> International Conference on Advanced Nanomaterials and Nanotechnology - ICANN 2023, 29 <sup>th</sup> Nov. to 1 <sup>st</sup> Dec. -2023.
6.	Sudhakar J, Dinakar Vignesh G, Hariji M.P, Aasif Mohammed M.B, C.Balamurugan, R.Harichandran, " <b>Design of Compact Wideband Antenna for WiFi 6E and WiMAX Applications</b> ", International Conference on Emerging Technologies and Applications for Smart and Sustainable World, 16 <sup>th</sup> to 18 <sup>th</sup> Dec 2021

7.	B.Nivetha, C.Balamurugan, “ <b>User Detection in ISM band</b> ”, International conference on Wireless Smart System Technology, 2017.
8.	Vigneshwari, C.Balamurugan “ <b>Implementation of Embedding text in audio signal using TMS 320C6713 Processor</b> ”, International Conference on Research vogues in Information and communication Technologies,2015.
9.	D.Vijayarohini, C.Balamurugan “ <b>Autonomous Ambient Navigation Intelligent Car</b> ”, 1 <sup>st</sup> International Conference on Research Vogues in Information and CommunicationTechnologies, Vol 1.No.1,February-2014.
10.	Harihara Sudhan A, Rithish Kumar S, Madhan kirubaharan G, <b>Balamurugan C</b> , Design and simulation of a rectenna for rf energy harvesting in the s-band, 2025 SECOND International Conference ON INTELLIGENT INNOVATIONS IN ENGINEERING AND TECHNOLOGY, PSG College of Technology 4th – 6th December, 2025
11.	Ishwarya M, Priyadarshini R, Abirami R M, <b>C.Balamurugan</b> , Microstrip Patch Antenna with Frequency Selective Surface for Wearable Applications, 6 th International Conference on Computational Intelligence (ICCI 2025), Sardar Vallabhbhai National Institute of Technology, Surat, India, December 27-28

#### FDP/Workshop/Seminar PROGRAMMES ORGANIZED

S.NO.	NAME OF THE PROGRAMME	DATES WITH DURATION	NO. OF PARTICIPANTS	Grant
1.	IEEE Sponsered Seminar on Antennas	18 <sup>th</sup> Oct 2014	30	Rs.50,000.00
2.	IEEE sponsored two days workshop on “Computational electromagnetics to RF and Microwave components – Practical Aspects”, National Engineering College, Kovilpatti	01 <sup>st</sup> – 02 <sup>nd</sup> Aug. 2016	40	Rs.20,000

#### GUEST LECTURER DELIVERED

S.NO.	TOPIC	COLLEGE NAME	EVENT DATE
1.	One day workshop on Patch Antenna design and simulation using EM tool.	National Engineering College, Kovilpatti	14.08.2025

2.	Hands on training program on Design Simulation and Fabrication of Microstrip Patch Antenna for 5GHz. National Engineering College, Kovilpatti	National Engineering College, Kovilpatti	03.03.2023
3.	Hands on training program on Design and Simulation of Antenna Arrays, IEEE Student Branch, National Engineering College, Kovilpatti.	National Engineering College, Kovilpatti	15.09.2023

INDUSTRY TRAINING PROGRAMMES ATTENDED			
S.NO.	NAME OF THE PROGRAMME	NAME OF THE INDUSTRY	DATES WITH DURATION
1.	Industry Know How program	<i>Data Patterns India Ltd, Chennai</i>	9 <sup>th</sup> December 2024 to 13 <sup>th</sup> December 2024 (5 days)
2.	R&D centre visit	ARCI, Hyderabad	29.01.2026 to 31.01.2026

**C.Balamurugan**