Ms. GOWRI MANOHARI R		
Designation:	**Assistant Professor**	
Qualification:	**M.E, Ph.D (Pursuing)**	
Area of specialization:	**Antenna Design, Optical Communication, Communication Systems.**	
Experience: (As On MAY 2024)	**Industrial Experience**	**Teaching Experience**
	-	**8.2 Years**
Number of workshop / FDP attended:	**Number of Workshops**	**Number of FDPs**
	5	**24**

Publications:	**Conference**		**Journal**		
	National	**International**	**SCI**	**Scopus**	**Others**
	2	**8**	**1**	**8**	**1**

Patents:	**National**	**International**
	-	**5**

Professional Body Membership:	**IEEE**

Staff Achievements:	• Received awards for producing 100% result in subjects handled in the year 2016, 2017, 2024. • Secured **91% (Elite + Gold)** in in NPTEL online examination on "Principles of Communication Systems-I", Jan-Apr-2025. • Secured **84% (Elite + Silver)** in NPTEL online examination on "Principles of Signals and Systems", Jan-Apr-2025. • Secured **94% (Elite + Gold, topper)** in NPTEL online examination on "Technical Communication for Engineers", July-August 2025. • Secured **90% (Elite + Gold, topper)** in NPTEL online examination on "Estimation for Wireless Communications MIMO /OFDM Cellular and Sensor Networks Systems, 2016.
Workshop Details:	• Participated in a Workshop on Hands on Experience in OptSim-15 organised by IETE, at Kalasalingam University,2016. • Attended an International Industrial Training programme on Electro-Pneumatics Organized by, SMC Pneumatics, July-2016. • Participated in a two-week ISTE Workshop on Signals and Systems Conducted by IIT, Kharagpur, at VIT University Vellore, 2014. • Participated in a Workshop on LaTex, at KCET, 2014. • Attended a Workshop on "Future Directions in Image Processing and Analysis", Conducted by SSN College of Engineering, Chennai, 2009

FDP Details:	- Attended a FDP on Recent Trends and Advancements in Semiconductor Devices Modelling through Machine Learning, AAA College of Engineering and Technology, Jan 2024. - Attended AICTE Recognized FDP on Antenna Design Techniques and Tools conducted by NITTTR, Chandigarh, Sep 2023. - Attended an online Faculty Development Programme on Recent Trends in Antenna Engineering and its applications sponsored by Ministry of Electronics and Information Technology,NIT Warangal, Feb 2023. - Attended a Seminar on Recent Trends in Communication Technologies in Velammal College of Engineering and Technology, Madurai, Oct 2022. - Attended a AICTE Sponsored Short term training programme on Recent Advancements of Computational Electromagnetics in Modern Microwave Antennas, organized by ECE, SVCE, 2020. - Participated in Two days Technical Seminar on Recent Trends in IoT Applications Organized by IETE Sivakasi Centre, March 2017. - Participated in a Faculty Development Training Programme on Communication Theory, at KCET, 2016. - Participated in a Faculty Development Training Programme on Electro Magnetic Theory Theory, at KCET, 2014. - Attended a Faculty Orientation Programme on Communicative English & Instructional Methodologies, at KCET, 2012. - Attended a Seminar on "Recent Trends in VLSI and Embedded Systems and Its Applications" – IETE Sivakasi Sub Centre at Mepco Schlenk Engineering

	College, Sivakasi, 2012.
	▪ Attended a Seminar on "Optical Communication Networks"- Mepco Schlenk Engineering College, Sivakasi, 2011.
	▪ Attended a Seminar on "Communication System Design Techniques and Tools" – IETE Sivakasi Sub Centre at Mepco Schlenk Engineering College, Sivakasi, 2011.
	▪ Attended FDP on "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education (AICTE) from 20th May to 24th May 2024.
	▪ Attended FDP on "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education (AICTE) from 19th August to 24th August 2024.
	▪ Attended FDP on "Perspectives of 6G towards Next-Gen Communications" organized by Department of ECE SSEC from 07.04.25 to 11.04.25
	▪ Attended FDP on "Design and Applications of Semiconductor Devices" organized by IEEE CAS Society from 05.08.24 to 10.08.24.
	▪ Attended FDP on "Communication Technologies - Connectivity Evolutions" organised by NITTTR Chandigarh from 27.05.2024 to 31.05.2024.
	▪ Attended FDP on "Future-Ready Antenna Design: Cutting-Edge Solutions for 5G mm-Wave and Beyond" organised by School of Electrical Engineering, VIT University from 14th October to 18th October 2024.
	▪ Attended FDP on "Intelligent Antenna Technologies: The Role of AI and ML in Wireless and Biomedical Applications", organised by IEEE APS Society at S.A Engineering College, Chennai, from 23rd to 30th

	December 2024.
	▪ Attended ATAL FDP on "AI and Quantum Computing: Glimpsing the Near Future" at Sri Sairam Engineering College from 20/01/2025 to 25/01/2025.
	▪ Attended NPTEL-AICTE FDP on "Machine Learning and Deep Learning – Fundamentals and Applications", from July to October 2024.
	▪ Attended One Week FDP on "**Innovative Antenna Design for Next-Generation Wireless Systems: From Concept to Application"** organised by the **Ministry of Electronics and Information Technology (MeitY), Government of India** from 04th August, 2025 to 10th August, 2025.
	▪ Attended 6 days FDP on "Leveraging Explainable Ai to Enhance Communication Systems, Signal and Image Processing" Organized by IEEE Madras Section by SSEC during 17th to 22nd November 2025.
	▪ Attended one week FDP on, "Quantum Computing and its applications" at Sri Sairam Institute of Technology, from 23.09.25 to 30.09.25.
	▪ Attended NPTEL-AICTE FDP on "Simulation of Communication Systems using MATLAB", from July to October 2025.

Industry Visit / Internships Attended:

- Attended 15 days Industrial Training Program on "Fundamentals of Quantum Computing at BosonQ Psi Corp & KwantumG Research Labs Pvt.Ltd" from 27th to 11th July 2024.
- Visited the Industry NLC on 23-09-24 with final year students of 2025 batch passed out.

Publication Details:

SCOPUS/SCI

- A. Sakthi Preetha, K. Kavitha, K. Karthika, R. Gowri Manohari, "Innovative Metasurface-Assisted Star-Coupled Microstrip Antenna Array for Next-Generation Wireless Systems", IEEE Explore Digital Library, 2025. **DOI:** 10.1109/STCR62650.2025.11019263.

- A. SakthiPreetha, K. Kavitha, K. Karthika, R. Gowri Manohari, "A Novel Metasurface-Embedded Antenna for WBAN Communications", IEEE Explore Digital Library, 2025. **DOI:** 10.1109/ICAECA63854.2025.11012352.

- Uma. M; Gowri Manohari. R; Jenifer. A; Prabhavathi. N; Sandhya Sasidharan; Mohan. C, "Design of A High Gain and Isolated Orthogonal Polarized Dual-Port Slotted MIMO Antenna for ISM Band Application", IEEE Explore Digital Library, 2025. **DOI:** 10.1109/WiSPNET64060.2025.11004862

- Arun Ramaveerapathiran; Raaga Bavithira; Gowri Manohari R, "A Novel Tuning Method of IMC-PID Controller for the Vertical Take-Off and Landing Aircraft System**",** IEEE Explore Digital Library, 2025. **DOI:** 10.1109/ICCIES63851.2025.11032785.

- B.Dhivya; Gowri Manohari R; T.Rajavenkatesan; T.Sathya; K.Anitha; K.Deepa, "Graph Convolutional Federated Learning for Privacy-Preserving Anomaly Detection in Heterogeneous IoT Environments", IEEE Explore Digital Library, 2025. DOI : 10.1109/ICACRS67045.2025.11324032.

- A.FranklinAlex Joseph; R.Gowri Manohari; A. Muthu Manickam; R. Sornalatha; A. Sakthi Preetha; S. P. Senthilkumar, " Design of a Compact Wideband Hexagonal Shaped Grid Array Antenna for 5G mm Wave Applications", IEEE Explore Digital Library, 2026. DOI: 10.1109/ICCES67310.2025.11337032.

- R.Gowri Manohari, K.Kavitha, R.Arun, "Design of Metamaterial Inspired Antenna Using Machine Learning and Optimization Techniques", IEEE Explore Digital Library, 2023. **DOI : 10.1109/ICCCI56745.2023.10128420**

- R. Gowri Manohari and T. Sabapathi, "*Analysis and Reduction of Polarization Mode Dispersion in an Optical Fiber*". IEEE Explore Digital Library, 2011. **DOI: 10.1109/ICONRAEeCE.2011.6129822**

- R. Gowri Manohari and T. Sabapathi, "*Analysis and Compensation of Polarization Mode Dispersion in Single Channel, WDM and 32-channel DWDM Fiber Optic System*", OPTIK- International Journal for Light and Electron Optics, ELSEVIER, Jan 2014.[SCI JOURNAL] https://doi.org/10.1016/j.ijleo.2013.06.003

- R.Gowri Manohari, M.Stella Mercy, "*Radio over Fiber Access for Integrated Broadband Wireless Systems using Opti System*", International Journal of Advanced Research Trends in Engineering and Technology (IJARTET) Vol. 4, Issue- 20, March 2017. **https://ijartet.com/2310/v4s20april2017kamarajece/conference.**

Conference Details :

- R.Gowri Manohari, K.Kavitha, R.Arun, "Design of Metamaterial Inspired Antenna Using Machine Learning and Optimization Techniques", IEEE International Conference on Computer Communication and Informatics (ICCCI), 2023.

- R.Gowri Manohari, "Arduino Based Smart Light System using Solar panel", International Conference on Technical Innovations in Electrical, Electronics, Computer and Communications, March 2017.

- R.Gowri Manohari, "Arduino Based Intelligent Street Light Control System using Solar Energy", National Conference on Recent Trends in Electrical, Electronics, Communication and Computing Technologies, March 2017.

- R.Gowri Manohari, "Intelligent Bus Alert System for the Visually Impaired", National Conference on Recent Trends in Electrical, Electronics, Communication and Computing Technologies, March 2017.

- R. Gowri Manohari and T. Sabapathi, "Analysis and Reduction of Polarization Mode Dispersion in an Optical Fiber". IEEE International Conference on Recent Advancements in Electrical, Electronics and Control Engineering (IConRAEeCE' 12), 2011.

- R. Gowri Manohari and T. Sabapathi, "Compensation of Polarization Mode Dispersion in Multichannel Fiber Optic System", International Conference on Advances in Communication & Technology (ICACT' 12), 2011.

- A. SakthiPreetha, K. Kavitha, K. Karthika, R. Gowri Manohari, "Innovative Metasurface-Assisted Star-Coupled Microstrip Antenna Array for Next-Generation Wireless Systems", International Conference on Smart Technologies, Communication and Robotics (STCR), May 2025.

- A. SakthiPreetha, K. Kavitha, K. Karthika, R. Gowri Manohari, "A Novel Metasurface-Embedded Antenna for WBAN Communications", International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation (ICAECA), April 2025.

- Uma. M; Gowri Manohari. R; Jenifer. A; Prabhavathi. N; Sandhya Sasidharan; Mohan. C, "Design of A High Gain and Isolated Orthogonal Polarized Dual-Port Slotted MIMO Antenna for ISM Band Application", International Conference on Wireless Communications Signal Processing and Networking (WiSPNET), March 2025.

- Arun Ramaveerapathiran; Raaga Bavithira; Gowri Manohari R, "A Novel Tuning Method of IMC-PID Controller for the Vertical Take-Off and Landing Aircraft System", International Conference on Computational Innovations and Engineering Sustainability (ICCIES), April 2025.

- A.FranklinAlex Joseph; R.Gowri Manohari; A. Muthu Manickam; R. Sornalatha; A. Sakthi Preetha; S. P. Senthilkumar, " Design of a Compact Wideband Hexagonal Shaped Grid Array Antenna for 5G mm Wave Applications", 10th International Conference on Communication and Electronics Systems (ICCES), October 2025.

- B.Dhivya; Gowri Manohari R; T.Rajavenkatesan; T.Sathya; K.Anitha; K.Deepa, "Graph Convolutional Federated Learning for Privacy-Preserving Anomaly Detection in Heterogeneous IoT Environments", 4th International Conference on Automation, Computing and Renewable Systems (ICACRS), 2025.

BOOKS/BOOK CHAPTERS PUBLISHED:

- Poornima P, Anu Disney, Lavanya Devi.S, Gowri Manohari. R, published a Book Chapter on " Integrating AI with IoT: Challenges and solutions" in book Merging

Artificial Intelligence With the Internet of Things (pp.1-32), IGI Global Scientific Publishing, May 2025**. DOI:**

- T. Rajasekar, P. Mohanraj, N. Thenmoezhi, R. Gowri Manohari, published a Book on "Embedded Systems and IoT", Leilani Katie Publication and Press, December 2024. (ISBN No. 978-93-6348-666-9).

- N. Thenmoezhi, R. Gowri Manohari, D. Mercy, published a Book on "IoT Based Systems Design", Charulatha Publications, July 2025. (ISBN No.13:978-93-6260-776-8)

PATENTS PUBLISHED:

- Published a Patent on "An efficient Wireless Power Transfer System with Metasurface for 5G Applications", November 2024.

- Published a Patent on "Crimson-Eye Facial Recognition Security Camera to Identify Criminals", June 2025.

- Published a Patent on "Hybrid Partial Array Token Petri Net Structure for Secure Pattern Recognition and Data Processing", May 2025.

- Published a Patent on "Design of a Wideband Square-Shaped Split-Ring Resonator (SRR) for RF Harvesting", June 2025.

- Published a Patent on "Miniaturised Antenna Design for Future Wireless Systems : ML-Based Gain Prediction and Optimization.

Online Courses details

- Successfully Completed 6 months online certification course on "Artificial Intelligence and Deep Learning conducted with IIT Roorkee in association with cloudxlab on 20/06/2025.

- Successfully completed NPTEL Certification course on "Machine Learning and Deep Learning – Fundamentals and Applications", from July to September 2024**.**

- Successfully completed NPTEL Certification course on " Principles of Communication Systems – I ", Jan-April, 2025.

- Successfully completed NPTEL Certification course on " Principles of Signals and Systems ", Jan-April 2025.

- Successfully Completed 8 Modules of National Initiative for Technical Teachers Training by NITTT, AICTE July 2025.
- Successfully completed NPTEL Certification course on "Estimation for Wireless Communications MIMO /OFDM Cellular and Sensor Networks Systems", 2016.
- Attended a Course on Communicative English at COL'S CALIBRE, 2013.
- Attended a course on LabView at KCET, 2016.

LECTURES DELIVERED

- Acted as a Resource Person for a Value-added course on 1D&2D Signal Processing using MATLAB and GUI organized by Dept. of ECE at KCET, 2016.

WORKSHOP/FDP/SEMINARS ORGANISED

- Organised a Guest Lecture on "Analog Circuits:Trends and Challenges" at Sri Sairam Engineering College, Chennai on 08.11.2024.
- Organised a Seminar on "Non-Linear Models in R programming Applications" at Sri Sairam Engineering College on 13.11.2024.
- Organised a Guest Lecture on "Unlocking 8051: Timers, Interfaces and Beyond at Sri Sairam Engineering College on 17.02.26.
- Presented Demo session in the workshop on OPTSIM tool in Mepco Schlenk Engineering College, 2012.