

Faculty Profile



Dr. M. Selvi , M.E., Ph.D
Professor & Deputy HoD /ECE

HIGHLIGHTS

- Total Number of Publications: 38
 - Scopus Indexed: 30
 - SCI : 5
 - Others: 7
- H-Index: 5
- Project Funding Received: 1
- Patents Published: 2
- Patents Granted: 1

PROFESSIONAL LINKS:

- Scopus ID: 6603935386
- Scopus Link: [Selvi, M. - Author details - Scopus](#)
- Google Scholar ID: 17PjGUYAAAAJ
- Anna University Faculty ID: 2122030
- AICTE Faculty ID: 1500233437
- Anna University Supervisor ID: 2540091
- LinkedIn: [\(12\) M Selvi Rajendrakumar | LinkedIn](#)

PROFESSIONAL BACKGROUND

- Teaching Experience till date: 26.5 years
- Industrial Experience: 3 years

INTERNATIONAL EXPOSURE

NIL

AREA OF SPECIALIZATION

- Wireless Optics (Free Space Optics)
- OFDM
- Assessment in Higher Education

Ph.Ds AWARDED WITH DETAILS: 3

Ms. Sasikala

Ms. Maya

Ms. Rajalakshmi

Ph.Ds GUIDING

- **Full Time Scholars: Nil**
- **Part Time Scholars : 3**

SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY:

- Intramural Fund – Rs 4,76,000 for the project on Data Storage and Optical Computing utilizing new Optically Stimulated Luminescence (OSL) phosphors in Jan 2023.
- Tamil Nadu State Council for Science and Technology (TNSCST) sponsored Student project titled “Unmanned Ground Vehicle for the Detection of Minesweeper” in the year 2012.
- Tamil Nadu State Council for Science and Technology (TNSCST) sponsored Student project titled “Brain Computer Interface using EEG Signal for Wheel Chair Movement” in year 2014.

PATENTS PUBLISHED/GRANTED:

- IOT Based Embedded System for Vegetable cultivation granted in Nov’24
- **Data Storage and Optical Computing utilizing new Optically Stimulated Luminescence (OSL) phosphors** published dated 16.02.2024.

COURSES CERTIFIED:

- **IUCEE – IIEECP -Certified Engineering Educator in 2019**
- **NPTEL Online Certification in Effective Engineering Teaching with ELITE Grade in 2019.**
- **Course Certification on Assessment in Higher Education- Professional Development for Teachers in 2020.**
- **NPTEL Online Certification Emotional Intelligence with ELITE Grade in 2020.**
- NPTEL Online Certification on Introduction to Internet of Things.
- NPTEL Online Certification on Accreditation and Outcome Based Education with Elite + Silver Grade in 2022.
- Completed certification course in IUCEE- Engineering Education Research – Oct. 2022- July2023
- Completed Advanced course in Chalkboard to Chatbot organized by IIT Ropar during March 2026
- Completed NPTEL + University of Canterbury Short Term Course on “ Designing Authentic assessment in the Age of AI – July to August 2026
- NPTEL Online Certification in “**Assessment of student Performance” during Jan – Apr 2026 with Elite + Gold grade**
- NPTEL Online Certification in “**Making Learning Engaging using Interactive Games” during July- Sep 2026 with Elite + Gold grade.**

ACHIEVEMENTS AND AWARDS

- As Honorary Secretary of IETE Chennai Centre during the tenure of 2018- 2020, Organized Zonal Seminar and received Best Zonal Organizer Award from IETE Head Quarter- Delhi.
- As core member of Saveetha Teaching Learning Centre, received Best TLC Award in 2022.
- As core member of Saveetha Teaching Learning Centre, received Best TLC Award in 2024.
- Received IUCEE- Individual Honorary Membership for the year 2025.
- Received AA rating for SPOC of Saveetha NPTEL Local Chapter for the July- Dec 2024 Jan – Apr 26, Sessions.

SPECIAL SESSIONS DELIVERED

- Delivered lecture on Slot antenna and other special antennas in Anna University sponsored FDP held at St. Peter's College of Engineering and technology, Avadi on 11.12.2014.
- Delivered Guest Lecture on Optical Communication and Networks at Francis Xavier Engineering, Tirunelveli on 13.08.2015.
- Delivered Guest Lecture on Li-Fidelity at Student's day Celebration, IETE Chennai Center on 24.02.2017.
- Delivered Guest Lecture on Digital Logic Family at Velammal Engineering College, Chennai on 03.09.2018.
- Resource Person for two sessions of AICTE Sponsored Two Week STTP – Creative Pedagogy and its Significance in Engineering Education held at at Saveetha Engineering College during 22.04.2019 to 04.05.2019.
- Delivered Guest Lecture on Optical Networks at Francis Xavier Engineering, Tirunelveli on 01.10.2019.
- Delivered Guest Lecture on Recent Trends in Optical Communication at Francis Xavier Engineering, Tirunelveli on 12.08.2021.
- Resource person the FDP on Recent Trends in Wireless Communication organized by Karpagam Academy of Higher Education, Coimbatore on 23.11.23.
- Delivered Guest Lecture on Recent Trends in “5G Communication” at Francis Xavier Engineering, Tirunelveli on 07.08.2025
- Acted as Resource person for One day FDP on **“From Outcomes to Impact: A Faculty Training on Outcome-Based Teaching, Learning and Assessment” held on 07.10.2026.**

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

NATIONAL CONFERENCE

1. Presented paper titled “ Reduction of PAPR in OFDM using Pulse Shaping Method” at National conference held at Adhiyaman College of Engineering, Hosur and won **Best Paper Award.**

2. Presented paper titled “PAPR Reduction in OFDM using BTRC Pulse” at National conference held at Noorul Islam College of Engineering, Nagercoil.

INTERNATIONAL CONFERENCE

1. Presented paper titled “ Performance of OFDM in Optical Fiber” at International Conference on Communication and Computing held at SRM University (Ramapuram Campus) during April 2010 and received **FIRST PRIZE**.
2. Presented a paper at International Conference held at Government College of Engineering, Tirunelveli, titled- “Performance of OFDM based FSO Communication systems using M-ary PSK modulation.
3. Presented paper at IRAJ International conference held at Chennai on 09. 02. 2015, titled “Study of Link Availability and Data Rate Analysis”.
4. Elakkiya, A & Selvi, M 2015, ‘Analysis of OFDM with Offset-MDPSK in optical wireless communication system’, Proceedings of Second International Conference on Sensing, Signal Processing and Security, St. Peter’s College of Engineering and Technology, Chennai.
5. Kaviyarasi, R & Selvi, M 2015, ‘Low-Complexity and Power Efficient VLSI Architecture for Turbo Decoder’ Proceedings of Second International Conference on Sensing, Signal Processing and Security, St. Peter’s College of Engineering and Technology, Chennai.
6. Selvi, M, 2017,’ Improving Power Efficiency of OFDM Based FSO System Using Linear Companding Transform’ Proceedings of International conference on Power, Control, Signals and Instrumentation Engineering, Saveetha Engineering College, Chennai.
7. A. Hema Malini & M. Selvi, 2019, ‘Improved Companding technique for better PAPR reduction in OFDM systems’ Proceedings of International conference ICATEM’19, Malaysia.
8. A. Vigneshwar & M. Selvi, 2022, ‘AI based Safe Driving Vehicle’ Proceedings of International conference on Recent Trends in Information Communication and Pervasive Technologies’22 (ICRRTICPT’22) held at Rajalakshmi Institute of Technology on 12 & 13 May 2022. Received Best paper Award also.
9. Presented paper titled “Classification of Brain Tumor Detection Techniques – A Review” at 8th International Conference on Electronics a, Communication and Aerospace Technology(ICECA 2024) on 6-8 Nov 2024 held at RVS Technical Campus. Coimbatore.
10. Presented paper titled “FPGA-based OFDM Systems for 5G and High- Speed Communication: A Comprehensive Review” at 8th International Conference on Electronics a, Communication and Aerospace Technology(ICECA 2024) on 6-8 Nov 2024 held at RVS Technical Campus. Coimbatore.
11. Presented paper titled “Review of Error Analysis of FSO OFDM System” at 5th International Conference on Data Intelligence and Cognitive Informatics (ICDICI 2024) on 18-20 Nov 2024 held at SCAD College of Engineering and Technology, Tirunelveli.

12. Presented paper Titled “A Review of Resource Allocation of OFDMA using LDPC Codes” at 8th International Conference on Electronics a, Communication and Aerospace Technology(ICECA 2024) on 6-8 Nov 2024 held at RVS Technical Campus. Coimbatore
13. Presented paper Titled “Performance Analysis of OFDMA system with Optimized Resource Allocation” at 8th International Conference on Multi -Agent System for Collaborative Intelligence (ICMSCI 2025) on 20-22 Jan 2025 held at Surya Engineering College, Erode.
14. Presented paper Titled “Comaparitive Analysis of Water-Filling and Round-Robin Algorithms in Resource Allocation in Multi-User OFDMA systems” at 3rd International Conference on Electronics and renewable Systems (ICEARS 2025) on 11-13 Feb 2025 held at St. Mother Theresa Engineering College, Tuticorin.
15. Presented paper Titled “Analysis of Bit Error Rate in FSO OFDM under different Climatic Condition” at 3rd International Conference on Electronics and renewable Systems (ICEARS 2025) on 11-13 Feb 2025 held at St. Mother Theresa Engineering College, Tuticorin.

WORKSHOP,SEMINAR, FDP PARTICIPATION

1. Attended one week workshop on “Research methodologies” held at Saveetha Engineering College, Chennai, conducted by IIT Bombay during 04.06.2012 to 10.06.2012.
2. Attended two day workshop on “Introduction to Akash Tablet” held at Saveetha Engineering College, Chennai, conducted by IIT Bombay during 10.11.2012 to 11.01.2012.
3. Attended two week workshop on “Analog Electronics” at held Saveetha Engineering College, Chennai, conducted by IIT Kharagpur during 04.06.2013 to 14.06.2013.
4. Attended one week FDP on “OFC System Design an Simulations” conducted by NITTTR, Chandigarh from 23.09.13 to 28.09.13.
5. Attended one day Authorship workshop on “How to Publish research papers in IEEE” at Indian Institute of Technology, Madras on 21.08.2015.
6. Attended A Short hands –on Training Course on ‘Internet of Things’ organized by ERNET India, Chennai held on 27- 29 Jan. 2016.
7. Attended one day program on 'GOI schemes & funding of TBI in colleges' held at Entrepreneurship Development Institute, Chennai, on 13.06.2016.
8. Attended Coordinator's Workshop on ' CMOS, Mixed Signal and Radio Frequency VLSI' at IIT Kharagpur during 18.09.2016 to 23.09.2016.
9. Attended one day Conclave on ' Pursuing Excellence in Teaching' at SSN College of Engineering on 07.01.2017.
10. Attended one day Workshop on “Internet of Things” held at IETE Chennai Centre on 28.11.2017.
11. Attended Regional Workshop on Research Based Pedagogical Tools conducted by IISER Pune, held at Bhavan’s Vivekananda College, Secundrabad, Telangana during 17.01.2018 to 19.01.2018

12. Attended Workshop on Outcome based Education through ICT conducted by NITTTR Chandigarh during 05.3.2018 to 09.03.2018.
13. Attended two days Faculty Development Programme on “Designing Research Projects, Proposal Writing, Grants and Funding” held at Saveetha Engineering College on 26.04.2018 and 27.04.2018.
14. Attended two days FDP on Effective Teaching held at Indian Institute of Technology during 07.05.2018 to 09.05.2018.
15. Attended Three days workshop on IUCEE International Engineering Educator pre-Certification Workshop held at Saveetha Engineering College during 03.05.2018 to 05.05.2018.
16. Participated in two days International Conference on Transformations in Engineering Education held at Bennet University, New Delhi during 04.01.2018 to 06.01.2018.

17. Attended IUCEE- International Engineering Educator Certification phase II and III certification by IUCEE- IEECP during Jan – July 2019.
18. Attended Sensitization Workshop on National Initiative for Technical Teacher Training held at NITTTR, Chennai on 20.02.2020.
19. Attended on day workshop on “Assessment Planning for Outcome Based Education” held at IIT, Madras on 21.02.2020.
20. Attended Online National FDP on Decoding Examination During and Post CoVID 19 organized by Skillslate on 08.05.2020.
21. Attended A Hands on Workshop conducted by IIT Bombay through BodhiTree platform on 'Effective and Efficient Online Teaching in the Age of Corona, held on 16.05.2020 along pre and post workshop activities and video preparation.
22. Attended three days Online FDP on “ Municipal Waste Management during COVID-19 Pandemic” conducted by Anurag University during 28.05.2020 to 30.05.2020.
23. Attended on Online Webinar on Evaluation Fun with Kahoot conducted by Indra Ganesan group of Institutions on 17.06.2020.
24. Attended on Online workshop on Optisystem New Release Software conducted by Opti Instrument on 29.07.2020.
25. Attended 5-day online FDP on the theme “Inculcating Universal Human Values in Technical Education” organized by All India Council for Technical Education(AICTE) from 12 July, 2021 to 16 July, 2021.
26. Attended two weeks Online Short-Term Course on “Design Thinking for Innovation in Higher Education” held at Saveetha Engineering College during 21.06.2021 to 03.07.2021.
27. Presented a “Case Study on Case Study on Problem / Project Based Learning - Digital Principles and System Design” at virtual IUCEE Mini-Symposium on P2BL on 09 and 10 October 2021
28. Attended one day FDP on “ Leader’s Secrets” conducted by Saveetha Teaching Learning Centre, Saveetha Engineering College on 05.01.2022.
29. Attended one FDP on Bridge’2022 conducted by ICT Academy on 13 July 2022.
30. Attended one day Workshop on Art and Diversity and Inclusivity held on 29.10.2022 at Saveetha Engineering college.
31. Attended Two day National level (online) Workshop on “Role of NAAC in Enhancing Quality in Higher Education Institutions” held at Ramco Institute of Technology Sponsored by National Assessment and Accreditation Council (NAAC) On 16th and 17th December 2022.
32. Attended a Webinar on “Machine Learning in Wireless Communication: 5G and Beyond” conducted by IETE Chennai Centre on 9.12.2022.
33. Attended the Tenth International Conference on Transformations in Engineering Educations (ICTIEE 2023) held at Vidhyavardhaka College of Engineering collaborated with IUCEE during 04.01.2023 to - 08.01.2023.

34. Attended Five Days Online FDP on : Research Trends in Optical Technologies and its Applications” Organized by School of Electronics Engineering during 05.01.23 to 09.01.23.
35. Attended five days online Workshop on “VLSI to System Design: Silicon to End Application approach” organized by AICTE in association with ST Electronics and Arm Educations. During 31.07.23 to 04.08.23.
36. Attended one day NPTEL Online Workshop on Fundamentals of Wireless Communication on 05.08.23.
37. Attended two days workshop on Cadence EDA tools conducted at Saveetha Engineering College on 11.01.24 and 12.01.24.
38. Participated in the Professional Development Programme conducted by NITTTR, Chennai from 15.07.24 to 20.07.24.
39. Attended one day NPTEL workshop on “Instructional Design” conducted jointly by IIT Madras and IIT Bombay on 01.02.2025.
40. Attended one week Capacity Building Program on “ From Chalkboard to Chatbot- Faculty Voyage in AI 2.0 conducted by IIT Ropar from 14.03.2026 to 19.03.2026.

PROFESSIONAL MEMBERSHIPS:

- Life member of ISTE
- Fellow Member of IETE
- IEEE Member and MTT Society Advisor
- Former Honorary Secretary – IETE Chennai Center (2018-2020)

OTHER DETAILS (If any):

- Acted as Reviewer for International Conference on Transformation In Engineering Education’21 during Oct 2020, 2022,2023,2024, 2025, 2026
- Journal reviewer for the Journal on Engineering Education Transformations from Jan2023 onwards.
- Organized the First and Second International Conference on Educating the Post-Millennial’s under Saveetha Teaching Learning Centre in the month of May 2022 & May 2024.
- Acted as Editor for the Conference Proceedings of International Conference on Educating the Post-Millennial’s (ICEM’24) as Book titled- “Pedagogical Revelations and Emerging Trends” with ISBN- 9781003587538.
- Book reviewer for the Book by Pearson Education -**10th edition of Thomas Floyd’s *Electronic Devices***.
- Journal Reviewer - Bulletin of the Polish Academy of Sciences: Technical Sciences – Feb 2025.
- Reviewer for the Regional Research Symposium in Project Based Learning conducted by MIT Viswapravag University during Nov2026