

Dr. R. Ramya					
Designation:	Assistant Professor				
Qualification:	PhD				
Area of specialization:	OPTICAL COMMUNICATION / OPTOELECTRONICS				
Experience : (As On February 2026)	Research Centre in IIT Madras Experience		Teaching Experience		
	2.5 Months	17 Years, 5 Months, 12 Days (As on Feb 2026)			
Number of workshop / FDP attended:	Number of Workshops		Number of FDPs		
	8		7		
Publications:	Conference		Journal		
	National	International	SCI	Scopus	Others (Book of Abstracts)
	1	2	3	Nil	1
Patents:	National		International		
	Nil		Nil		
Professional Body Membership:	IEEE Senior Member- 100630128 Lifetime member in IETE (AM-221219) National Digital Library (NDL) Membership				
Staff Achievements:	<ul style="list-style-type: none"> ● Reviewed Elsevier's Optics Communications International Journal ● Reviewer for the IEEE International Conference on Data, Energy and Communication Networks (IC-DECoN 2025) 				

	<ul style="list-style-type: none"> ● Obtained 100% result in Digital Signal Processing in an Engineering College under Anna University affiliation 			
Workshop Details:	Sl. No.	Title	Venue	Month/Year
	1.	Pedagogy	MIT Campus, Anna University	June 2019
	2.	Recent Trends in Photonics & Hands on Training using Optsim	IFET College of Engineering	June 2019
	3.	Orientation programme for Young Teachers	MIT Campus, Anna University	Feb 2019
	4.	Programming Embedded System	MIT Campus, Anna University	March 2018

	5.	Modelling and Simulation of Next generation optical communication and Networks	SRM Institute of Science and Technology	Dec 2017
	6.	Advance Java Programming	HCL CDC unit of HCL Info Systems Ltd	July 2012
	7.	Digital Image processing using MATLAB	Panimalar Institute of Technology	Nov 2012
	8.	MATLAB and its applications	SSN Engineering College	May 2007

FDP Details:	Sl. No.	Title	Venue	Month/Year
	1.	Online UHV-II FDP	All India Council for Technical Education (AICTE)- Online	May - June 2024.
	2.	Inculcating Universal Human Values in Technical Education	All India Council for Technical Education (AICTE)- Online	July 2021
	3.	Role of Science and Spirituality for a Harmonious and Fulfilling Human Community	Research Foundation of India and St. Paul Institute of Professional Studies, Indore	March 2021
	4.	Information Security and Privacy	Motilal Nehru National Institute of Technology, Uttar Pradesh	March 2021
	5.	Advanced C++	VIT, Chennai	May 2020
	6.	Machine Learning for Signal Processing	Sri Venkateswara College of Engineering, Sriperumbudur	May-2020
	7.	Signals and Systems	Madras Institute of Technology, Anna University	May to Jun 2014

International Journals Publication Details (SCI):

1. **Ramya, R** and Piramasubramanian, S, ‘Effect of Franz-Keldysh absorption on short optical pulse generation in Transistor Laser’, Optics Communications, Elsevier, vol. 474, article number.126087, May (2020), **Impact Factor: 2.125, SCI Indexed.** (<https://www.sciencedirect.com/science/article/abs/pii/S0030401820305046>)
2. **Ramya, R**, Piramasubramanian, S, Ganesh Madhan, M & Rebecca, D, ‘Effect of Collector Voltage on the Large and Small Signal Modulation Characteristics of 980 nm Transistor Laser’, Defence Science Journal, vol. 70, no. 5, pp. 529-533, Oct(2020), **Impact Factor: 0.667, SCI Indexed.** (<https://publications.drdo.gov.in/ojs/index.php/dsj/article/view/16341>)
3. **R. Ramya**, S.Piramasubramanian, M.GaneshMadhan, ‘Influence of Franz Keldysh effect on the modulation depth and distortion characteristics of transistor laser’, Applied Physics B, Springer, vol. 130, article no. 95, pp. 1-11, May(2024), **Impact Factor: 2.1, SCI Indexed.** (<https://link.springer.com/article/10.1007/s00340-024-08224-x>)

International Conference (INDEXED IN SCOPUS)

1. K. Mariammal, R Arunadevi, J Lurdhumary, **R Ramya**, M S Vinotheni, Yuvikashree, Swathi D R, "IOT Based Smart Home Automation Using ESP32," *2025 International Conference on Computing and Communication Technologies (ICCCT)*, Chennai, India, 2025, pp. 1-5, doi: 10.1109/ICCCT63501.2025.11020191. (Scopus Indexed).

International Conference

1. **R.Ramya**, Piramasubramanian, S, Ganesh Madhan, M & Rebecca, D 2020, ‘Effect of Collector Voltage on the Large and Small Signal Modulation Characteristics of 980nm Transistor Laser’, presented Poster Paper in the International Conference on Emerging Advancement in Science and Technology and 10th India-Japan Science & Technology Conclave, held from 05-09-2019 to 06-09-2019 at Manekshaw Centre, New Delhi, India.

National Conference

1. **R.Ramya**, S.Vasudevan, "Performance Evaluation of Routing Protocol in MANETS" presented in a National level conference on Recent trends in Science and Technology, organized by Dr.M.G.R. Educational and Research, India from 26- May-2005 to 27-May-2005.

Book of Abstracts:

R. Ramya, S. Piramasubramanian and M. GaneshMadhan , “Numerical Analysis of Modulation and Pulse Generation Characteristics of Transistor Laser”, pp :223-228 (6 pages), 32nd DAE-BRNS National Laser Symposium (NLS-32) January 29 - February 1, 2024, organized by Raja Ramanna Centre for Advanced Technology (RRCAT), Indore - 452013, Madhya Pradesh.

Online Certification details

Successfully completed Online Certification in “**Joint AI & Quantum Expert with Amazon Braket**”, co-organized by QpiAI India Pvt Ltd and Centre for Continuing Education, Indian Institute of Science, Bengaluru, India (**Certificate ID: 676d295db0d7598171cf8f73**)

NPTEL Online Courses details

Sl. No	Title	Certification Authority	Month/Year
1	Principles of Digital Communications	NPTEL	Jul-Oct 2025
2	Signals and Systems	NPTEL	Jan-Apr 2025
3.	Signal Processing Techniques And Its Applications	NPTEL	Jan-Apr 2025
4.	Principles of Communication Systems - I	NPTEL	Jan-Apr 2025
5.	Simulation of Communication Systems using Matlab	NPTEL	Jul-Oct 2024
6.	Optical Wireless Communications for Beyond 5G Networks and IoT	NPTEL	Jan-Apr 2023
7.	Op-Amp Practical Applications: Design, Simulation and Implementation	NPTEL	Jan-Apr 2023
8.	Digital Circuits	NPTEL	July-Oct 2021

Invited Lectures:

1. Delivered a lecture on “Optical Fiber Sensors for Biomedical Applications”, on 07-Aug- 2025, organized by SRM Valliammai Engineering College, Kattankulatur.
2. Delivered a lecture on “Control System Engineering”, on 26-Sep- 2018, organized by Loyola Institute of Technology, Nazarethpet.
3. Delivered a lecture on “Linear Integrated Circuits”, on 28-Feb- 2018, organized by St. Joseph College of Engineering, Sriperumbudur.
4. Delivered a lecture on “Semiconductor Lasers”, on 04- Aug-2014 organized by Anna University Regional Centre, Coimbatore.

Workshop Organized:

Organized Advanced Optical Communication (AOC) Outreach programme “Workshop on Optical Communications”, from 18th-22nd, December 2023 at Raman Hall, IIT Research Park, Tharamani, Chennai.

FDP Organized:

Organized IEEE CAS Faculty Development Program (FDP) on “Design and Application of Semiconductor Devices, from 5th August 2024 to 10th August 2024, Sri Sairam Institute of Technology, West Tambaram, Chennai

Conference attended:

Participated 3rd International Conference on Signal Processing, Communications and Networking conducted by IEEE and organized by Madras Institute of Technology, India 2015

Webinar Attended:

1. Attended online one day webinar on “Machine Learning Model Using Linear Regression Algorithm”, organized by SRM Easwari Engineering College on 18-May-2020.
2. Attended online one day technical webinar on “Distributed power sensing for Real-Time Power line monitoring for Raman scattering in optical fibers” by IIT Madras on 16-May 2020.