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### **EDUCATIONAL QUALIFICATION:**

<b>Examination</b>	<b>Discipline/ Specialization</b>	<b>School/ College</b>	<b>Board/ Univ.</b>	<b>Year of Passing</b>	<b>Result (in % or class)</b>
M.Tech.	Computer Science / Augmented Reality and Virtual Reality (AR & VR)	Indian Institute of Technology Jodhpur	IIT Jodhpur	June 2025	First Class (7.3)
PDF	Differential Equations & Control Theory	Srinivas University, Mangalore	Srinivas University	2024-25	Pursuing
Ph.D.	Differential Equations	Karunya University, Coimbatore	Karunya University	June 2014	Highly Commended
M.Phil.	Functional Analysis	Pachaiyappa's College, Chennai-30	University of Madras	Aug 2009	72% (Highly Commended)
B.Ed.	Mathematics	Alwin College of Education, Chennai-87	University of Madras	Apr 2008	76% I Class with Distinction
M.Sc.	Mathematics	R.K.M. Vivekananda College, Chennai-04	University of Madras	Apr 2007	81% I Class with Distinction
M.Sc.	Mathematics	Tamil University, Thanjavur	Tamil University	May 2019	75% I Class with Distinction
B.Sc.	Mathematics	T.K. Govt. Arts College, Vridhachalam	University of Madras	Apr 2005	70% (I Class)
HSC	Sci & Maths	Panimalar Hr Sec School, Perambalur	TN State	Mar 2002	74% (I Class)
SSLC	TN State	G.T.R Hr. Sec School Gomukhi Dam	TN State	Mar 2000	70% (I Class)

### **TEACHING EXPERIENCE:**

Sl. No.	Name of the Institutions	Position/ Designation	Duration		Years of Experience
			From	To	
1	Vel Tech University, Chennai - 62	Professor, NCC Officer & Head - Student Welfare	June 2023	Till Date	2 years 2 month
2	Vel Tech University, Chennai - 62	Associate Professor, Associate NCC Officer & Head - Student Welfare	May 2016	May 2023	7 years 1 month
3	VIT University, Vellore.	Assistant Professor & Associate NCC Officer	Sept 2012	April 2016	3 years 7 months
4	Kalaignar Karunanidhi Institute of Technology, Coimbatore.	Assistant Professor	June 2010	August 2012	2 years 3 months
5	Arignar Anna Institute of Science and Technology, Chennai.	Assistant Professor	June 2009	May 2010	1 Year

### **ADMINISTRATIVE EXPERIENCE:**

- Associate **NCC** Officer (Army & Naval Wing) - completed 3+3 months **NCC Officers** Training in Officer Training Academy (OTA), Kamptee, Maharashtra - both Army & Navy with Director General NCC Batton, Commandant OTA Gold Medal & first in all India.
- Associate **NCC** Officer Naval Wing - completed 20 days Refreshers Course at **NCC Officers** Training in Officer Training Academy (OTA), Kamptee, Maharashtra - first in all India.
- **BOS** Member in Karunya University, Coimbatore.
- Internal Quality Assurance Cell (**IQAC**) Committee member responsible for compilation of criteria gained knowledge in documenting files for submission to Accreditation agencies like NAAC, NBA, QIS and NIRF.
- National Board of Accreditation (**NBA**) Coordinator
- Various Government Exam Coordinator in University level (TNPSC Group-II, IV and Police Exam, TRB)
- Organized **One Week Faculty Development Program on "Algebraic System and Combinatorics"** from **19th - 23rd Feb, 2024**
- Organized **Two Week Online International Faculty Development Programme on "Current Trends in Applications of Mathematics"**, **from 21-09-2022 to 04-10-2022**.
- Organized a Guest Lecture on "**Approximate Solutions for Linear Equations**", on 12-02-2025.

- Organized a Special Lecture on "**The Role of Mathematics in Engineering Innovation and Excellence**", on 12-02-2025.
- **JEE & NEET** Question setter at National Testing Agency (NTA), Noida, UP
- Editor for **Journal of Mathematics and Humanities Engineering Open Access Open Journal (MHEAOJ)**.
- **Editor and Reviewer** in the reputed international journals
- **Life Member** in Indian Society of Theoretical and Applied Mechanics
- Doctoral Committee Member in the various Universities
- NSS Officer
- Vivo Voce Examiner in Vels University
- Thesis Examiner at Bharathiar University, Coimbatore.

#### **Acted Resource Person in the Webinars & Workshops**

- Alpha Arts and Science College, Porur, Chennai - 600 116, "**Math Wave Riding with Current Trends**", on 09-04-2024.
- SIMATS Engineering, Thandalam, Chennai - 602 105, "**Exploration of the Applicability of Mathematics**", on 01-02-2024.
- MGR Educational and Research Institute, Maduravoyal, Chennai-37, "**Current Trends in Mathematics**", on 23-01-2024.
- Mar Gregorios College of Arts & Science, Maduravoyal, Chennai-37, "**Introduction to MATLAB**" on 17-02-2023.
- M. P. Nachimuthu M. Jaganathan Engineering College (MPNMJEC), Chennimalai, Erode, "**Problem Solving Techniques Using MATLAB**", on 04-11-2022.
- Rajagopal Polytechnic College, Gudiyatham, "**Unity and Peace on Observance**", on 12-01-2022.
- Mar Gregorios College of Arts & Science, Maduravoyal, Chennai-37, "**Introduction to MATLAB**" on 06-09-2021.
- St. Joseph University, Dimapur, Nagaland-797115."**National Level Webinar on "MATLAB**", on 23-08-2021.
- Vinayaka Mission's Research Foundation - Deemed to be University (VMRFDU), "**An Overview of MATLAB**", on 25-06-2021.
- Mohamed Sathak A J College of Engineering, "**Problem Solving Techniques Using MATLAB**", on 08-06-2021.
- Karunya University, "**Basics MATLAB with Problem Solving Techniques**" on 24.07.2020.
- Gurunanak College, "**An Overview of MATLAB**", on 22-07-2020.
- Mohamed Sathak A J College of Engineering, "**Problem Solving Techniques Using MATLAB**", on 29-05-2020.
- Vel Tech University, "**Problem Solving Techniques Using MATLAB**", on 22-05-2020.
- Don Bosco College, Yelagiri Hills, "**Problem Solving Techniques Using MATLAB**", on 15-05-2020.
- Sri Malolan College of Arts and Science, Madurantakam, "**Applied Mathematics for MATLAB**" on 01-02-2019.

## **SOFTWARE PROFICIENCY:**

- Knowledge in MATLAB, Python, SCILAB, R-LANGUAGE, SPSS, Mathematica, Latex and MS-Office.
- Knowledge in C, C++ Programming languages.

## **HONOURS AND AWARDS:**

- **Faculty Excellence in Research and Publication Award** from **SNS Faculty Excellence Award 2024** on 27-12-2024
- “**Excellence in Academic Service and Social Responsibility**” in the Academic Year 2023-24 received from Nature Science Foundation, Coimbatore, Tamil Nadu, India
- “**Best Social worker Award**” in the Academic Year 2022-23 received from Nature Science Foundation, Coimbatore, Tamil Nadu, India
- Best Faculty Award in the Academic Year 2018-19 & 2019-20 received from Nature Science Foundation, Coimbatore, Tamil Nadu, India
- Received Research award in the academic year 2012-2013, 2013-2014, and 2014-2015 at VIT University, Vellore.
- Best Teacher Award was received for the academic years 2010-2010 in Kalaignar Karunanidhi Institute of Technology. Best teacher award was felicitated due to production of good results, discipline and Teaching etc.,
- **Life Member** in Indian Society of Theoretical and Applied Mechanics
- **Life Member** in Indian Mathematical Society
- **Life Member** in International Association of Engineers (IAENG)

## **LIST OF ONLINE COURSES COMPLETED:**

- Successfully completed the course on “**Python Basics**” in **Coursera** on 26-07-2022.
- Successfully completed the course on “**Programming for Everybody (Getting Started with Python)**” in **Coursera** on 13-05-2022.
- Successfully completed the course on “**Differential Equations for Engineers**” in **Coursera** on 01-11-2021.
- Successfully completed the course on “**Matrix Algebra for Engineers**” in **Coursera** 15-06-2021.
- Successfully completed the course on “**Vector Calculus for Engineers**” in **Coursera** on 03-03-2021.
- Successfully completed the course on “**Introduction to R Programming**” in Bharat Institute of Engineering and Technology on July 2020 to Sep 2020.

- Successfully completed the course on “**Linear Regression for Business Statistics**” in Coursera on 05-05-2020.
- Successfully completed the course on “**Plagiarism in Academic Research**” in Lalatendu Bidyadhara Kumar Barik on YouTube from 15.05.2022 to 25.05.2022.

## **RESEARCH EXPERIENCE –16 YEARS**

**Doctoral Research (2010–2014):** Department of Mathematics,  
School of Science and Humanities,  
Karunya University, Coimbatore, Tamil Nadu, India.

**Dissertation:** Existence and Controllability Results for Impulsive Integro-differential Systems with Infinite Delay.

**Dissertation (M.Phil.) :** Fixed Point Theory (2008-2009).

### **AREA OF RESEARCH:**

Differential Equations & Control Theory.

### **AREA OF INTEREST:**

Functional Differential Equations & Control Theory (Linear, Non-Linear, Quasilinear, Impulsive, Stochastic, Fuzzy, Fractional Differential Equations, Numerical Examples with Delay), Fuzzy Analysis and Fuzzy Graphs, Chemical Graph Theory, Cryptography, Difference Equation, Mathematical Modeling, Artificial Neural Network, Machine Learning, Deep Learning.

### **RESEARCH GUIDANCE:**

#### **PhD Scholars Guided:**

- **Dr. K. A. Venkatesan** completed his research in *Differential Equations* entitled "**Studies on Existence of Solutions for Nonlinear Impulsive Neutral Functional Integrodifferential Equations with Delays in Banach Spaces**" (2021).
- **Dr. K. Elavarasan** completed his research in *Fuzzy Graph Theory* entitled "**A Study on Generalization of Connected Total Perfect Domination in Fuzzy Graphs**" (2022).
- **Dr. Kathavarayan P.** completed his research in Chemical Graph Theory entitled "**Degree-Based Topological Indices for Some Molecular Graphs**" (2024).
- **Dr. J. Thiravidarani** completed her research in *Differential Equations* entitled "**Existence and Controllability of Multi-Order Impulsive Neutral Fuzzy Functional Integrodifferential Equations with Finite Delay**" (2025).

- **Dr. Madhumitha S** completed her research in *Differential Equations* entitled "**Existence and Controllability Results for Second-Order Neutral Functional Random Integrodifferential Equations with Delays**" (2025).
- **Mr. P. Raghavendran** – Thesis submitted in Fractional Differential Equations entitled "**Existence, Uniqueness, Stability, and Controllability of Impulsive Neutral Fractional Volterra-Fredholm Integro-Differential Systems with State-Dependent Delay for Applications in Artificial Intelligence and Cryptography**" (2025).
- **Mr. S. Manikandan** – Thesis submitted in Mathematical Modeling entitled "**Mathematical Modeling of Infectious Diseases Using Fractal-Fractional Analysis**" (2025).

#### **Scholars Currently Pursuing Research:**

- **Mr. K. Nithyanandhan** – Research in *Fractional Differential Equations* (Since 2019)
- **Mr. P. Udhayasankar** – Research in *Fractional Differential and Difference Equations* (Since 2023)
- **Ms. R. Swetha** – Research in *Mathematical Modeling* (Since 2024)
- **Mrs. S. S. Sumaiya Banu** – Research in *Fractional Differential Equations* (Since 2024)
- **Ms. D. Jaya Priya** – Research in *Fractional Differential Equations* (Since 2025)
- **Mohammed Ashik S** – Research in *Fractional Neural Differential Equations* (Since 2025)
- **Anushree S** – Research in *Fractional Differential Equations* (Since 2025)

#### **MSc Project Guided:**

- Mr. R Siva Prakash completed his postgraduate project entitled "Analysis on Indian Export and Import of Leather Commodities" (2021).
- Mr. Dhatchinamoorthi completed his Postgraduate Project in the area of Differential Equations, entitled "Artificial Neural Network in Differential Equations" (2023).

#### **Patent Publication:**

<b>Sl. No.</b>	<b>Application Number</b>	<b>Date of Filing</b>	<b>Title of Invention</b>	<b>Publication Date</b>
1.	202241003733	22/01/2022	Vedic-Mathematics based Effective High- Speed and Low Power Multiplier Architecture using for DSP Application	04/02/2022
2.	202341038577	05/06/2023	Optimizing Numerical and Analytical Methods for Accurate	30/06/2023

<b>Sl. No.</b>	<b>Application Number</b>	<b>Date of Filing</b>	<b>Title of Invention</b>	<b>Publication Date</b>
			Solutions to Partial Differential Equations	
3.	202341048739	19/07/2023	Predictive Analytics-based Stochastic Differential Equation Inventory Model for Demand Forecasting	01/09/2023
4.	202341053540	09/08/2023	System and Method for Optimal Control of magneto hydrodynamics Fluid Flows using Mathematical Modelling	01/09/2023
5.	202341055037	16/08/2023	Advanced Numerical and Analytical methods for Optimization of Engineering Designs	01/09/2023
6.	202341058284	30/08/2023	A Non-Linear Optimization Algorithm for Solving Fractional Differential Equations with Boundary Value Issues	08/09/2023
7.	202341069381	13/10/2023	A statistical method for Parkinson's disease prognosis using clinical data	15/10/2023
8.	202341075815	04/10/2023	Solving the integer and fractional order differential equations by GR transform	22/12/2023
9.	202341073732	14/10/2023	Optimizing Elliptic Curve Selection for Prime Numbers	08/11/2024
10.	202341079475	22/11/2023	Blockchain-enabled Stochastic Differential Equation Inventory Model for Transparent and Secure Inventory Management	19/01/2024
11.	202441039057	18/04/2024	Advanced Method and System for Discrete Signal Transformation Using the P-Transform	31/05/2024

<b>Sl. No.</b>	<b>Application Number</b>	<b>Date of Filing</b>	<b>Title of Invention</b>	<b>Publication Date</b>
12.	202441042487	31/05/2024	A Device for Removing Noise from Acoustic Signals	07/06/2024
13.	202441084958	27/09/2024	System for Real-Time Driver Alerts in Low-Visibility Conditions	15/11/2024
14.	202441093904	30/11/2024	System and Method for Robotic Arm Control Utilizing H-Transform for Enhanced Sensor Accuracy and Feedback	13/12/2024
15.	202441098841	14/12/2024	A Y-Transform Integrated System for Detecting Forest Fires and Monitoring Wildlife	20/12/2024
16.	202441100402	18/12/2024	A Novel V-Transform Integrated Solar-Powered Environmental Monitoring Robot	03/01/2025
17.	202541036417	15/04/2025	Revolutionizing Railway Track Pedestrian Crossings with S-Transform for Enhanced Safety and Operational Efficiency	09/05/2025

<https://iprsearch.ipindia.gov.in/PublicSearch/PublicationSearch/ApplicationStatus>

## Research Projects & Funding Summary

### Major Research Proposals Submitted

#### 1. NBHM (2025–26)

- ◆ **Title:** Existence, Uniqueness, Stability and Controllability of the Fractional Order Mathematical Model with Artificial Neural Network
- ◆ **Role:** Principal Investigator
- ◆ **Funding Agency:** National Board for Higher Mathematics (NBHM)
- ◆ **Status:** Submitted

#### 2. SERB – MATRIX Scheme (2025–26)

- ◆ **Title:** Applying Fractional Calculus and Neural Networks for Predictive Analysis of Agricultural, Maritime, and Aviation Systems
- ◆ **Role:** Principal Investigator
- ◆ **Funding Agency:** Science and Engineering Research Board (SERB)
- ◆ **Status:** Submitted

#### 3. TNSCST (2024–25)

- ◆ **Title:** Applying Fractional Calculus and Neural Networks for Agricultural Predictive Analysis
- ◆ **Role:** Principal Investigator

- ◆ *Funding Agency:* Tamil Nadu State Council for Science and Technology (TNSCST)
  - ◆ *Status:* Submitted
- 4. NBHM (2023–24)**
- ◆ **Title:** Existence, Controllability and Stability of the Fractional Order Mathematical Model for Various Issues
  - ◆ *Role:* Principal Investigator
  - ◆ *Funding Agency:* National Board for Higher Mathematics (NBHM)
  - ◆ *Status:* Submitted

### Technology-Based Rural Innovation

- 5. UBA – IIT Delhi (2025)**
- ◆ **Title:** A Stand-Alone Parabolic Dish Solar Concentrator for Tamil Nadu Rural Conditions
  - ◆ *Proposal ID:* U-0489/TN/TRV/RESS/50K/2
  - ◆ *Role:* Principal Investigator (Co-PI: Dr. M. Suba)
  - ◆ *Funding Agency:* Unnat Bharat Abhiyan, National Coordinating Institute, IIT Delhi
  - ◆ *Category:* Customization of Technology | Rural Energy Systems
  - ◆ *Total Budget:* ₹50,000
  - ◆ *Status:* Submitted

### Seed & Institutional Research Funding

- 6. Institutional SEED Grant (2024)**
- ◆ *Project:* Artificial Intelligence and Fractional Modeling for Non-Infectious Dynamic Systems
  - ◆ *Sanctioned Amount:* ₹30,000
- Research Promotion Fund (RPF)**
- ◆ *Academic Year 2024–25:* ₹50,000
  - ◆ *Academic Year 2025–26:* ₹1,00,000

## PUBLICATIONS IN REFEREED INTERNATIONAL JOURNALS - : (122)

1. K.R. Balasubramanian, E. Prabha, **Tharmalingam Gunasekar**, Optimizing Message Dissemination in Social Networks Through Fuzzy Regular Equitable Fair Domination, Journal of Applied Mathematics and Informatics, 43(4), 2025, 1245 - 1260. (**WoS - Scopus**).
2. Prabakaran Raghavendran, **Tharmalingam Gunasekar**, Ahmad Aloqaily, Nabil Mlaiki, Application of Cryptography for Controllability Results of Fractional Neutral Volterra-Fredholm Integro-Differential Equations with State-Dependent Delay, International Journal of Analysis and Applications, (**WoS - Scopus**). (Accepted for Publication).
3. **Tharmalingam Gunasekar**, R. Swetha, S. Manikandan, Irshad Ayoob, Nabil Mlaiki, Fractal-Fractional Modeling and Analysis of Monkeypox Disease using Atangana-Baleanu Derivative, International Journal of Analysis and Applications, (**WoS - Scopus**). (Accepted for Publication).
4. **Tharmalingam Gunasekar**, Srinivasan Madhumitha, Prabakaran Raghavendran, Kamalendra Kumar, Existence Results for Second Order Random Functional Integro-differential Equations with

Infinite Delay, Journal of Vibration Testing and System Dynamics, (**WoS - Scopus**). (Accepted for Publication).

5. Prabakaran Raghavendran, **Tharmalingam Gunasekar**, Shyam Sundar Santra, Dumitru Baleanu, Neural Network Framework for Controllability of Fractional Volterra Fredholm Integro-Differential Equations with State-Dependent Delay, Journal of Mathematics and Computer Science, 40(3), 2026, 292-3309, **Q1 – WoS - Scopus**, doi: 10.22436/jmcs.040.03.01.
6. **Gunasekar T**, Udhayasankar P, Raghavendran P, Suba M, Santra S.S, Karmakar, S. (2025). Solving Fractional Difference Equations by Sawi Transform, Advances in Mathematical Modelling, Applied Analysis and Computation. ICMMAAC 2024. Lecture Notes in Networks and Systems, vol 1395. Springer, Cham. [https://doi.org/10.1007/978-3-031-90914-6\\_17 \(Scopus\)](https://doi.org/10.1007/978-3-031-90914-6_17).
7. Murugan Suba, Arikrishnan Venkatesan, **Tharmalingam Gunasekar**, Srinivasan Madhumitha, Prabakaran Raghavendran, Shyam Sundar Santra and Prodipto Dhali Analyzing Existence and Controllability in Second-Order Functional Integro-Differential Inclusions with Infinite Delay and Random Effects, Advances in Mathematical Modelling, Applied Analysis and Computation. ICMMAAC 2024. Lecture Notes in Networks and Systems, vol 1395. Springer, Cham. [https://doi.org/10.1007/978-3-031-90914-6\\_10 \(Scopus\)](https://doi.org/10.1007/978-3-031-90914-6_10)
8. Raghavendran, Prabakaran and **Tharmalingam Gunasekar**, Optimized Integral Transform and Modular Arithmetic Encryption for Efficient Security in Digital Supply Networks, Global Integrated Mathematics, 1(1), 2025, 1-12. <https://gim.gospub.com/index.php/gim/article/view/3> (Non Scopus)
9. P. Udhayasankar, T. Gunasekar, P. Raghavendran, M. Suba, Application of Pourreza transform to solve fractional integro-differential equations, Journal of Applied Mathematics and Informatics, 43(3), 2025, 659 - 673. (**WoS - Scopus**). <https://jami.or.kr/out/06071250585093047.pdf>
10. Prabakaran Raghavendran, **Tharmalingam Gunasekar**, Saikat Gochhait, Exploring Solona's Market Volatility with Artificial Neural Network: A Novel Approach to Cryptography Price Forecasting, 2025 International Conference on Computing and Information Technology (ICICIT), IEEE Xplore: 21 May 2025. (**Scopus**).
11. **Tharmalingam Gunasekar**, Srinivasan Madhumithaa, Prabakaran Raghavendrana and Murugan Suba, Existence and Approximate Controllability for Random Functional Differential Equations with Finite Delay, Italian Journal of Pure and Applied Mathematics, 2025, **WoS** (Accepted for Publication).
12. Raghavendran, P., **Gunasekar, T.**, Suba, M., Venkatesan, A., Santra, S.S., Dhali, P., Analysis of Fractional Integro Differential Equations Utilizing Mahgoub Transform, Advances in Mathematical Modelling, Applied Analysis and Computation. ICMMAAC 2024. Lecture Notes in Networks and Systems, vol 1394, 135-149, 2025, Springer, Cham. [https://doi.org/10.1007/978-3-031-90917-7\\_9 \(Scopus\)](https://doi.org/10.1007/978-3-031-90917-7_9).

13. Murugan Suba, Arikrishnan Venkatesan, **Tharmalingam Gunasekar**, Shanmugam Manikandan, Prabakaran Raghavendran, Shyam Sundar Santra & Shubhankar Karmakar, Advancing Zika Virus Control with Fractional Order Optimal Control with Wolbachia-Infected Aedes Aegypti Mosquitoes, Advances in Mathematical Modelling, Applied Analysis and Computation. ICMMAAC 2024. Lecture Notes in Networks and Systems, vol 1394, 160–183, 2025, Springer, Cham. [https://doi.org/10.1007/978-3-031-90917-7\\_11](https://doi.org/10.1007/978-3-031-90917-7_11) (Scopus).
14. Murugan Suba, **Tharmalingam Gunasekar**, Jothivelu Thiravidarani, Prabakaran Raghavendran, Arikrishnan Venkatesan, Shyam Sundar Santra & Debasish Majumder. A Novel Method for Applying Real-World Transportation Problems with Neutrosophic Octagonal Fuzzy Numbers, Advances in Mathematical Modelling, Applied Analysis and Computation. ICMMAAC 2024. Lecture Notes in Networks and Systems, vol 1394, 184–195, 2025, Springer, Cham. [https://doi.org/10.1007/978-3-031-90917-7\\_12](https://doi.org/10.1007/978-3-031-90917-7_12) (Scopus).
15. **Gunasekar Tharmalingam**, Raghavendran Prabakaran, Shyam Sundar Santra and Dumitru Baleanu, A New Mathematical Integral Transformation for Advancing Solutions to Differential Equations with Scientific Applications, Advanced Studies in Nonlinear Dynamical Systems. Nonlinear Systems and Complexity, vol 41, 2025. Springer, Cham. [https://link.springer.com/chapter/10.1007/978-3-031-84323-5\\_12](https://link.springer.com/chapter/10.1007/978-3-031-84323-5_12) (Scopus).
16. **Gunasekar Tharmalingam**, Madhumitha Srinivasan, Shyam Sundar Santra and Dumitru Baleanu, Existence and Controllability for Second-Order Neutral Functional Integro-differential Equations with Infinite Delay and Random Effects, Advanced Studies in Nonlinear Dynamical Systems. Nonlinear Systems and Complexity, vol 41. Springer, Cham. [https://doi.org/10.1007/978-3-031-84323-5\\_13](https://doi.org/10.1007/978-3-031-84323-5_13) (Scopus).
17. **Tharmalingam Gunasekar**, Shanmugam Manikandan, Prabakaran Raghavendrana and Ali Akgul, On Atangana-Baleanu Fractal-Fractional Dengue Fever Mathematical Model, Journal of Environmental Accounting and Management, WoS (Accepted for Publication).
18. Prabakaran Raghavendran, **Tharmalingam Gunasekar**, Irshad Ayoob, Nabil Mlaiki, AI-Driven Controllability Analysis of Fractional Impulsive Neutral Volterra-Fredholm Integro-Differential Equation with State-Dependent Delay, AIMS Mathematics, 10(4), 2025, 9342–9368. (**Q1-SCI-WoS Journal**). DOI: 10.3934/math.2025432
19. Prabakaran Raghavendran, **Tharmalingam Gunasekar**, Dinesh Thakur, Prakash Chand Thakur and Bal Krishan, Predictive Modeling of Chemical Processes Using Differential Equations and Machine Learning Synergy, Oriental Journal of Chemistry, 41(2), 2025. :DOI: <https://bit.ly/4cCC7IW> (WoS).
20. Srinivasan Madhumitha, **Tharmalingam Gunasekar**, Prabakaran Raghavendran, Shyam Sundar Santra, Samad Noeiaghdam, A study on the existence results for neutral functional random integro-differential equations with infinite delay, Journal of Mathematical Modeling, 13 (3), 2025, 675-693. DOI: 10.22124/jmm.2025.27789.2447 (**WoS – Scopus**).

21. **Tharmalingam Gunasekar**, Periyasamy Udhayashankar, Ammar Alsinai and Prabakaran Raghavendran, Modeling oil production management with fractional-order dynamics and complexity analysis, Multiscale and Multidisciplinary Modeling, Experiments and Design, 8 (248), 2025, 1-22. **WoS – Scopus.** <https://doi.org/10.1007/s41939-025-00850-y> (**WoS – Scopus**).
22. Prakash Thakur, Dinesh Thakur, **Tharmalingam Gunasekar**, Prabakaran Raghavendran, Saikat Gochhait, (2025). "Application of Integral Transform Algorithms for Augmenting Cryptographic Security and Performance Analysis". In AI-Driven Healthcare Cybersecurity and Privacy, 187-203, 2025. DOI: 10.4018/979-8-3373-2827-0. (**Scopus**)
23. Prabakaran Raghavendran, **Tharmalingam Gunasekar**, A Mathematical Approach to Enhance Cybersecurity in AI-Driven Healthcare Diagnostics Using J-Transform, AI-Powered Systems for Healthcare Diagnostics and Treatment, IGI Global books, 245 – 265, 2025. (**Scopus**), DOI: 10.4018/979-8-3693-9735-0.
24. Amitesh Prakash, Saikat Gochhait, Prabakaran Raghavendran, **Tharmalingam Gunasekar**, Incorporating Virtual and Augmented Reality for Advanced Medical Education, AI-Powered Systems for Healthcare Diagnostics and Treatment, IGI Global books, 329 – 342, 2025. (**Scopus**), DOI: 10.4018/979-8-3693-9735-0
25. **T. Gunasekar**, K. Nithyanandhan, P. Raghavendran, B. N Hanumagowda, Jagadish V Tawade, Nashwan Adnan OTHMAN, Manish Gupta, M. Ijaz Khan, Controllability of Intuitionistic Fuzzy Neutral Integro-Differential Equations with Nonlocal Conditions, Systems and Soft Computing, 2025, 1-40. DOI: <https://doi.org/10.1016/j.sasc.2025.200229> (**Science Direct – WoS – Scopus**).
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**Google Scholar:**

**ResearchGate:**

**Scopus:**

**Web of Science**

Citation	All
Citations	415
h-index	12
i10-index	15

RG Score : 704.1  
 Citations : 452  
 h-index : 13

Citations: 301  
 H-index : 10

Citations: 116  
 H-index : 7

**Google Scholar** : <https://scholar.google.com/citations?user=gNtyJvsAAAAJ&hl=en>

**Scopus Link** : <https://www.scopus.com/authid/detail.uri?authorId=55790915400>

**Web of Science** : <https://www.webofscience.com/wos/author/record/GRJ-2359-2022>

**Research gate** : [https://www.researchgate.net/profile/Dr\\_Gunasekar\\_T/stats](https://www.researchgate.net/profile/Dr_Gunasekar_T/stats)

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**Vidwan** : <https://vidwan.inflibnet.ac.in/profile/500884/NTAwODg0>

#### **EVENT ATTENDED/ORGANIZED:**

FDP/Guest Lecture/Webinar/Seminar/Workshop	Organized	Attended
<b>FDP</b>	2	28
<b>Guest Lecture/Seminar</b>	2	3
<b>Webinar</b>	1	148
<b>Workshop</b>	9	31

#### **EXTRA-CURRICULAR ACTIVITIES:**

- Associate NCC Officer (Army & Naval Wing) - completed (3+3) 6 months **NCC Officers** Training in Officer Training Academy (OTA), Kamptee, Maharashtra - both Army Wing & Navy Wing.
- NCC “B” and “C” Certificate Holder
- Member of NSS& NSS Officer
- University Sports player in Kho-Kho, Discus throw etc.,

### **TECHNICAL SKILLS:**

- Done an Honor Diploma in Computer Applications (HDCA) consisting of modules in MS Office, Internet, etc.
- Typewriting Junior First Class.

### **STRENGTHS:**

- Positive attitude & Time Management.
- An optimist who makes himself and others Happy all the time.
- Excellent track record and experience in teaching math at various levels.
- Experienced in helping students understand mathematic concepts and developing interest in the subject.
- Ability to develop relationships with students and guide them in developing skills.
- Passion for teaching mathematics and solving problems for students.
- Skilled in assessing and working on the weak and strong points of students.
- Preparing lessons according to the understanding level of students.
- Ability to convert difficult topics into easy to make students understand easily.

### **HOBBIES:**

- Playing cricket, Kabaddi and Drill.
- Listening music.
- Watching TV

### **PERSONAL PROFILE:**

Name	:	Gunasekar. T
Father's Name	:	R. Tharmalingam
Languages Known	:	Tamil and English
Date of Birth	:	04.03.1984
Nationality	:	Indian
Religion	:	Hindu (BC)
Marital Status	:	Married (Two Kids)

## **REFERENCES:**

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### **Dr. P. Suresh**

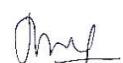
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## **Declaration**

I hereby declare that all the information furnished above is true to the best of my knowledge and belief.

Place: Chennai – 62

Date: 02-08-2025



**(Dr. S/Lt. GUNASEKAR T)**