

## BIO DATA



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### 1. Educational Qualification:

Degree	Branch / Specialization	Institute/University	Year of Passing
B.Sc.	Mathematics	Ayya Nadar Janaki Ammal College, Sivakasi	2007
M.Sc	Mathematics	Ayya Nadar Janaki Ammal College, Sivakasi	2009
M.Phil	Mathematics	Bharathidasan University, Trichy	2010
Ph.D	Mathematics	Periyar University, Salem	2024
CSIR - NET	Mathematical Sciences	CSIR	2011, 2012, 2013 (Three times)
GATE	Mathematics	GATE	2010, 2012 and 2026 (Three times)

### 2. Professional/ Industry Experience: (in chronological order)

S.No	Designation	Institution/ Organization	Period	
			From	To
1.	Assistant Professor	Ramco Institute of Technology	07.06.2018	Till date
2.	Assistant Professor	Dhirajlal Gandhi College of Technology	29.06.2016	06.06.2018

Updated as on 05.06.2025

3.	Lecturer	Kalasalingam Institute of Technology	06.07.2011	31.10.2012
4.	JRF (BRNS Project)	IIT Madras, Chennai	02.10.2010	16.05.2011

### 3. Research Interest:

Ring Theory and Module Theory

### 4 Publications

#### 4.1 JOURNAL PUBLICATIONS: -

- A. Ramachandran, M. Muthukumar, S. Gayathri, **T. Selvaganesh**, M. Balamurugan and Balaanandhan Radhakrishnan, “Numerical and Graphical Analysis of Hyers-Ulam Stability for Additive-Quadratic Functional Equations in Modular Spaces”, Boletim da Sociedade Paranaense de Matemática (Accepted for Publication) (Scopus)
- G. Kannan, S. Balamurali, G. Selvaraj, **T. Selvaganesh**, “Estimation of lot acceptance probabilities for certain special purpose sampling plans for induced hormone gastrin secretion using crisp and fuzzy Weibull distributions”, International Journal of Mathematics in Operational Research (Accepted for Publication) (Scopus)
- T. Manimaran, **T. Selvaganesh**, G. Selvaraj, K. Subramanian, S. Karthikeyan “Strength of vertex Irregularity of some product of graphs”, Advances in Nonlinear Variational Inequalities , 28 (6s) (2025), 601 - 610. (Scopus)
- R. Saravanakumar, K. Basari Kodi, **T. Selvaganesh**, K. Subramanian, K. Saranya, Nazek Alessa3, “Variational Iteration Method for Solving Reaction Diffusion Equation in Oscillatory Chemical Reactions”, International Journal of Analysis and Applications. 22:156 (2024) 1-13. (Scopus)
- T. Manimaran, **T. Selvaganesh**, K. Subramanian, G. Selvaraj, S. Karthikeyan “Edge Irregularity Strength of Graphs on Mean Labeling”, Library Progress International, 44 (3) (2024), 9287 - 9294. (Scopus)
- **T. Selvaganesh** and C. Selvaraj, “Bi-amalgamated Rings with Weakly p-clean Properties”, Annals of Pure and Applied Mathematics. 29 (2) (2024), 109 - 118. (Peer Reviewed)
- **T. Selvaganesh**, “Feebly p-clean Properties in Amalgamated Rings”, Annals of Pure and Applied Mathematics. 29 (1) (2024), 73 - 81. (Peer Reviewed)
- **T. Selvaganesh**, T. Manimaran, K. Subramanian, G. Selvaraj, R. Saravanakumar, Muthukrishnan Anand, “A Note On Strongly Gorenstein  $\mathcal{X}$ -Flat Modules”, Journal of Advanced Zoology 45(S3) (2024), 82-86 (Web of Science)

- **T. Selvaganesh** and C. Selvaraj, “p-clean properties in amalgamated rings”, Ratio Mathematica. 47 (2023), 375 - 384. (UGC Care list)

#### 4.2 CONFERENCE PUBLICATIONS: -

1. Presented a paper entitled, “**g(x)-p-clean properties in amalgamated rings**” in the International Conference on Mathematical Challenges and Novel Applications organized by ANJAC, RIT and SFRC on 21st and 22nd March 2024.
2. Presented a paper entitled, “**Strongly J-clean properties in amalgamated rings**” in the International Conference on New Trends in Applied Mathematics and Statistics (ICNTAMS - 2023) on 25<sup>th</sup> October 2023 organized by the Department of Mathematics, St.Joseph College of Arts and Science for women, Pagalpatty, Omalur (TK), Salem.
3. Presented a paper “**A study on feebly p-clean rings**” at Three - Day International Conference on Analysis and Number Theory (ICAN-2K22) during 27-29, October 2022 conducted by Ayya Nadar Janaki Ammal College, Sivakasi, Ramco Institute of Technology, Rajapalayam and The Standard Fireworks Rajaratnam College for Women, Sivakasi.
4. Presented a paper “**Finite Direct Projective Modules**” in the "36th Annual Ramanujan Mathematical Society Conference (RMS 2021)” organised by the Department of Mathematics, School of Engineering, Amrita Vishwa Vidyapeetham, Coimbatore on 07 August, 2021.
5. Presented a paper “**A Note On Strongly Gorenstein X-Flat Modules**” in the International conference on Smart Technologies and Applications (ICSTA 2022) conducted by RIT during 11-12 March, 2022.
6. Presented a paper “**A Characterization of Strongly Gorenstein  $x_y$ - projective and  $x_y$ - injective modules**” in the International Web Conference on Smart Engineering Technologies – 2020 during 26-27, June 2020 organised by Ramco Institute of Technology, Rajapalayam.
7. Presented a paper “**A study on strongly Gorenstein  $\square$ -projective,  $\square$ -injective and  $\square$  flat modules**” TNSCST sponsored International Conference on Applications of Mathematics in Science and Technology during 25-26 July, 2019 organized by AAA college of Engineering and Technology, Sivakasi.

#### 4.3 BOOK/BOOK CHAPTER PUBLICATIONS

Sl. No.	Title of Paper / Book/ Monograph / Lab Manual	Author(s)	Journal / Conference / Publisher details	Level (International, National)

Updated as on 05.06.2025

1.	Applied Calculus - An activity Oriented Approach with competitive edge	Dr. K. Basarikodi, Dr. S. Saravanakumar <b>Mr.T.Selvaganesh</b>	Pearson India publishers	National
2.	Discrete Mathematics (I and II Edition)	Dr. K. Basarikodi, Dr.L.Sathikala, Dr.T.Manimaran, Mr.K.Subramanian, Dr.R.Subasree, <b>Mr.T.Selvaganesh</b>	Vishnu Prints Media	National
3.	Math Workbook	Dr. K. Basarikodi, Dr.L.Sathikala, Dr.T.Manimaran, Mr.K.Subramanian, Dr.U.Kumaran, Dr.R.Subasree, Dr.G.Selvaraj, <b>Mr. T. Selvaganesh</b>	-	Institute level

#### 5 Funded Projects: -

S.No.	Title of the project	Funding Agency	Duration	Amount	Status
1.	UBA activities project	The State Institute of Rural Development and Panchayat Raj (SIRDPR)	-	Rs. 60000	-

#### 6 Ph.D. guidance: -

Sl.No	Scholar name	University	Topic	Status

#### 7 Short term Courses / Seminars /FDP/Workshop/Conference attended:

Sl.No	Title of the event	Date	
		From	To
1.	Online International Faculty Development Programme titled "Empowering Multi-Disciplinary Educators"	15.12.2025	19.12.2025
2.	five-day national-level Faculty Development Programme (FDP) on 'Computational Intelligence and Data Science for STEM Faculty Using R & Python'	09.06.2025	13.06.2025
3.	Faculty Development Programme on Algebra, Analysis, and Number Theory	16.12.2024	20.12.2024
4.	Faculty Development Program on ‘Unveiling Emerging Research Trends in Mathematics’	20.08.2024	21.08.2024

5.	Webinar on “R&D Conclave 2024”	26.12.2024	26.12.2024
6.	Online Seminar titled Math on AI	10.12.2024	10.12.2024
7.	Webinar on “Machine Learning Based Statistical Methods for High Dimensional Databases	29.06.2024	29.06.2024
8.	National Seminar on Recent Advances in Mathematics (NSRAM-2024)	15.03.2024	15.03.2024
9.	Extramural Lecture series - ELS002- “Integrating the CDIO principles through effective teaching learning”	29.02.2024	29.02.2024
10.	Five Day Online Faculty Development Program on Recent Advances in Applied Mathematics	04.09.2023	08.09.2023
11.	5 day online FDP on “AICTE Incorporating Universal Human Values in Education” Conducted by AICTE	06.03.2023	10.03.2023
12.	Five day Faculty Development Programme on Advance Trends in Mathematical Modelling	09.01.2023	13.01.2023
13.	Two Week Online International Faculty Development Programme on "Current Trends in Applications of Mathematics"	21.09.2022	04.10.2022
14.	one week FDP on “Software Tools for Mathematical Education”	30.08.2021	05.09.2021
15.	Anna University sponsored Online Six-Day FDTP on “MA8351-Discrete Mathematics"	28.06.2021	03.07.2021
16.	5-Day Online FDP on "Universal Human Values for DEEKSHARAMBH", organized by NIT, Patna	21.09.2020	25.09.2020
17.	Online workshop on "Virtual Tools for Teaching & Learning Process" organised by Department of Mechanical engineering, Ramco Institute of technology.	27.09.2020	27.09.2020
18.	ONLINE FACULTY DEVELOPMENT PROGRAM ON “INTRODUCTION TO FUZZY SETS AND ITS GENERALIZATION”	10.06.2020	10.06.2020
19.	Three days FDP on “ONLINE TEACHING VIA GOOGLE LMS During COVID-19 PANDEMIC”	28.05.2020	30.05.2020
20.	Online FDP on “MA8551-Algebra and Number Theory”	26.05.2020	27.05.2020
21.	Three Days National Level Online Course on “Operations Research”	18.05.2020	20.05.2020

22.	International Level Webinar on “Mathematics (History of Mathematics)”	09.05.2020	09.05.2020
23.	Orientation and Awareness program on OBE and SAR preparation	23.11.2019	23.11.2019
24.	3 day FDP on Team Building	18.11.2019	20.11.2019
25.	TNSCST sponsored International Conference on Applications of Mathematics in Science and Technology	25.07.2019	26.07.2019
26.	Faculty Development Programme	03.12.2018	05.12.2018
27.	Course on “MATLAB onramp”	22.11.2018	22.11.2018
28.	Two Days Workshop on Linear Algebra	27.06.2018	28.06.2018
29.	Three days training programme on “Art of Counseling”	19.06.2018	21.06.2018

**8. Short term Courses / Seminars /FDP/Workshop/Conference organized:**

Sl.No	Title of the event	Date	
		From	To
1.	International Conference on Mathematical Challenges and Novel Applications	21.03.2024	21.03.2024
2.	Webinar on “Applications of Combinatorial Objects to Graph Labeling Problems”	12.04.2023	12.04.2023
3.	International Conference on Sustainable Technology in Civil Engineering and Applied Sciences (ICSTCA 2023)	24.03.2023	25.03.2023
4.	International Conference on Analysis and Number Theory 2022 (ICAN-2022)	27.10.2022	28.10.2022
5.	International Conference on Analysis and Applied Mathematics 2022(ICAAM-22)	26.04.2022	28.04.2022
6.	International conference on Smart Technologies and Applications (ICSTA 2022)	11.03.2022	12.03.2022
7.	AUFDTP on Discrete Mathematics	28.06.2021	03.07.2021

8.	National Web Conference on Challenges and Innovation in Engineering and Technology	19.03.2021	20.03.2021
9.	International Web Conference on Smart Engineering Technologies.	26.06.2020	27.06.2020
10.	Online FDP on “MA8551-Algebra and Number Theory”	26.05.2020	27.05.2020
11.	Group discussion on research proposal writing in Mathematics	06.07.2019	06.07.2019
12.	Guest Lecture on “Amusing facts on mathematical induction”	05.09.2018	05.09.2018

## 9. Online Courses

1. Differential Equations: Fourier series and Partial Differential Equations./ MIT
2. Calculus 1C: Coordinate Systems & Infinite Series/ MIT
3. Introduction to Differential Equations/ MIT
4. Mathematics for machine learning : Linear Algebra/ Imperial College London
5. Differential Equations for Engineers/ The Hong Kong University of Science and Technology
6. Vector Calculus for Engineers / The Hong Kong University of Science and Technology
7. Matrix Algebra for Engineers / The Hong Kong University of Science and Technology
8. Discrete Mathematics/ Shanghai Jiao Tong University
9. Operations Research: An Active Learning Approach/ The Hong Kong Polytechnic University
10. Transfer functions and the Laplace Transform/ MIT
11. Probability - The Science of Uncertainty and Data/ Massachusetts Institute of Technology
12. Module 1 – Orientation Towards Technical Education and Curriculum Aspects / NITTT
13. Introduction to Programming with MATLAB/ Vanderbilt University
14. Module 3 – Communication Skills, Modes & Knowledge Dissemination / NITTT
15. Module 4 – Instructional Planning and Delivery / NITTT
16. Module 5 - Technology Enabled Learning & Life Long Self Learning / NITTT
17. Module 6 - Student Assessment and Evaluation / NITTT
18. Module 7 - Creative Problem Solving, Innovation and Meaningful R & D / NITTT
19. Differential Equations: Linear Algebra and  $N \times N$  Systems of Differential Equations / Massachusetts Institute of Technology
20. Module 2 - Professional Ethics & Sustainability / NITTT
21. Data Science Math Skills / Duke University
22. Data Science Mathematics / Great Learning

23. Statistics 1 Part 1: Introductory statistics, probability and estimation / The London School of Economics and Political Science
24. Numerical Methods for Engineers / The Hong Kong University of Science and Technology
25. Multivariable Calculus / IIT Roorkee (NPTEL)
26. Introduction to Abstract and Linear Algebra / IIT Kharagpur (NPTEL)
27. Basic Linear Algebra / IIT Bombay (NPTEL)

**10. Patents filed/awarded: -**

- Published a patent in the title “Novel Algorithm for Rapid Prime Number Factorization Using Quantum Computing” (Application number is 202341080268) on 22.12.2023.
- Published a patent in the title “Wearable Nanotechnology-Enabled Biosensor for Real-Time Health Monitoring and Analysis” (Application number is 202541001912) on 08.01.2025.
- Published a patent in the title “AI-Optimized Management of Smart Grids and Development of Advanced Nanotechnology-Enhanced Energy Storage Technologies” (Application number is 202541001915) on 08.01.2025.
- Published a patent in the title “AI-Driven Mathematical Forecasting System Using Hybrid Regression Models for Dynamic Event Prediction in Financial and Meteorological Applications” (Application number is 202541088018) on 16.09.2025.

**11. Membership in Professional societies: -**

- ISTE – Lifetime Membership

**12. Awards, Recognition & Achievements: -**

- Delivered a lecture on the topic “Aptitude and Attitude for Success” in the One-day workshop on “Aptitude Development Programme” on 09 September 2025 at Ayya Nadar Janaki Ammal College, Sivakasi.
- Delivered a lecture on the workshop ‘One day State Level Workshop for CSIR - NET/ TN-SET/ GATE/TRB-Polytechnic Exams’ on 04 March, 25 at Theni Kammavar Sangam College of Arts and Science, Theni.
- Delivered a Guest Lecture in a one-day seminar on “Advanced Statistical Modelling Techniques for Data Analysis” conducted by the Department of Science and Humanities, R P Sarathy Institute of Technology, Salem on July 16, 2023.
- Delivered a Maths Aptitude Lecture on Training Program on Life Skills and Employability Skills for UBA village school students.
- Received the “Best Library User” award for the year 2022, 2023 and 2024.

**Any others (Board of studies/Governing Council/Staff Selection/ Reviewer/other duties)**