



Name : Dr. R. SARAVANAKUMAR

Designation : Assistant Professor

Department : Mathematics

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1. Educational Qualification

Degree	Branch / Specialization	Institute/University	Year of Passing
B. Sc	Mathematics	VHNSN College, Virudhunagar, Madurai Kamaraj University	2013
M.Sc	Mathematics	VHNSN College, Virudhunagar, Madurai Kamaraj University	2015
M.Phil	Mathematics	Saraswathi Narayanan College, Madurai, Madurai Kamaraj University	2016
Ph.D	(Science and Humanities) Mathematics	University College of Engineering – Dindigul, Anna University	2022

2. Professional/ Industry Experience

: (in chronological order)

S.No	Designation	Institution/ Organization	Period	
1	Assistant Professor	Vidhyaagiri College of arts and science, Karaikudi	08-03-2022	15-07-2022
2	Assistant Professor	Easwari College of Engineering, Ramapuram, Chennai	01.08.2022	05.12.2022

Updated as on 05.06.2026

3	Assistant Professor	Ramco Institute of Technology, Rajapalayam	12.12.2022	Till date
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3. Research Interest: Ordinary Differential Equations

4 Publications

SCI JOURNAL PUBLICATIONS

1. **R. Saravanakumar**, P. Pirabaharan, M. Muralikannan, and L. Rajendran, Transient Current for a Rotating Disk Electrodes Produced by a Potential Step, Russian Journal of Electrochemistry, 54(12), 1067–1072, 2018. (SCI)
2. **R. Saravanakumar**, P. Pirabaharan, L. Rajendran, The theory of steady state current for chronoamperometric and cyclic voltammetry on rotating disk electrodes for EC' and ECE reactions, Electrochimica Acta, 313,441-456, 2019. (SCI)
3. **R. Saravanakumar**, P. Pirabaharan, Marwan Abukhaled, and L. Rajendran, Theoretical analysis of voltammetry at a rotating disk electrode in the absence of supporting electrolyte, Journal of Physical Chemistry B, 124, 443–450, 2020. (SCI)
4. R. Swaminathan, **R. Saravanakumar**, K.Venugopal, L. Rajendran, Analytical solution of non linear problems in homogeneous reactions occur in the mass-transfer boundary layer: homotopy perturbation method, International Journal of Electrochemical Science, 16, 210644, 2021. (SCI)
5. **R. Saravanakumar**, P. Pirabaharan, L. Rajendran, Transport and kinetics in an electroenzymatic process incurred in PPO based rotating disk bioelectrodes, Journal of Electroanalytical Chemistry, 913,116293, 2022. (SCI)
6. M. Lilly Clarence Mary, **R. Saravanakumar**, D. Lakshmanaraj, L. Rajendran, M.E.G. Lyons, Mathematical modelling of unsteady flow of gas in a semiinfinite porous medium, International Journal of Electrochemical Science, 17, 220619, 2022. (SCI)
7. P. Pirabaharan, **R. Saravanakumar**, L.Rajendran, Analysis of transient current in rotating disc electrode, AIP Conference Proceedings, 3160, 130001 (2024). (SCOPUS)
8. **R. Saravanakumar**, K. Basari Kodi, T. Selvaganesh, K. Subramanian, K. Saranya, Nazek Alessa, Variational Iteration Method for Solving Reaction Diffusion Equation in Oscillatory Chemical Reactions, International Journal of Analysis and Applications, 22 (2024), 156. (SCOPUS)

INTERNATIONAL JOURNALS

1. M. Syed Ibrahim, **R. Saravanakumar**, R. Asokan, Analytical Solutions of Nonlinear Equation in Immobilized Enzyme In A Spherical Porous Matrix: New Homotopy Perturbation Approach, International Journal of Computational Engineering Research, 07 (07), 58-65, 2017.
2. M. Syed Ibrahim, S. Pavithra, **R. Saravanakumar**, R. Ashokan, L. Rajendran, Modelling of Non Linear Enzyme Reaction Process Using Variational Iteration Method, International Journal of Computational Engineering Research, 06 (08), 36-45, 2016.
3. R. Malini Devi, S. Pavithra, **R. Saravanakumar**, L. Rajendran, Analysis of Nonlinear Vibrations of Single Walled Carbon Nanotubes, International Journal of Modern Engineering Research, 06 (11), 51-62, 2016.

4.1 Book/Book chapter publications

5 Funded Projects

S.No.	Title of the project	Funding Agency	Duration	Amount	Status
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6 Ph.D. guidance

Sl.No	Scholar name	University	Topic	Status

7 Short term Courses / Seminars /FDP/Workshop/ConferenceAttended:

Sl.No.	Name of Programme/event	Duration		Total number of days
		From	To	
1.	Seven Days National Faculty Development Program On “Advances in Nonlinear Dynamics and Applications in Engineering”	21.04.2025	28.04.2025	7
2.	Five Day National Faculty Development Program on “Recent Development in Pure and Applied Mathematics”	23.12.2024	28.12.2024	5
3.	Five Day International Virtual Faculty Development Program on “Algebraic Structures”	16.12.2024	20.12.2024	5
4.	Five Day International Virtual Faculty Development Program on “Mathematics and its Application”	11.03.2024	15.03.2024	5

5.	One Day National Level Workshop On Applications Of Graph Theory In New Trends And Small Wireless Area Networks.	21.02.2024	21.02.2024	1
6.	5-Day International Workshop on Recent Advances in Differential Equations and Applications (IWRADDA)	27.10.2023	31.10.2023	5
7.	Five day Faculty Development Programme on Recent Advances in Applied Mathematics	04.09.2023	08.09.2023	5
8.	Five day Faculty Development Programme on Advance Trends in Mathematical Modelling	09.01.2023	13.01.2023	5

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

Sl.No	Title of the event	Organized by	Date	
			From	To
1	Computational Intelligence and Data Science for STEM Faculty using R & Python	RIT	June 09, 2025	June 13, 2025

8. Online Courses

sno	Course title	University	Date
1.	NPTEL – Basic Linear Algebra	IIT Bombay	2025-26
2.	NPTEL – Introduction to Abstract and Linear Algebra	IIT Karagpur	2025-26
3.	Numerical Methods for Engineers	The Hong Kong University of Science and Technology	2024-25
4.	Discrete Mathematics	Shanghai Jiao Tong University	2024-25
5.	NPTEL - Multivariable Calculus	IIT Roorkee	2024-25
6.	Differential Equations: Linear Algebra and NxN Systems of Differential Equations	Massachusetts Institute of Technology, USA	2022-23
7.	Data Science Math Skills	Duke University, USA	2023-24
8.	Matlab Onramp	--	2022-23

9. Patents filed/awarded : (*Published patents*)

1.	Dr. K. Basarikodi, Dr. T. Manimaran, Mr. K. Subramanian, Dr. T. Selvaganesh, Dr. R. Saravanakumar, Dr. G. Kannan, Mr. S. Muthukumar, Dr. N. Nagamani, Dr. S.Saravanakumar	Title of the invention: AI-Driven Mathematical Forecasting System Using Hybrid Regression Models for Dynamic Event Prediction in Financial and Meteorological Applications	Application No.202541088018A 31/10/2025
2.	Dr. G. Kannan, Dr. R. Saravanakumar Mr. K. Subramanian	Combining blockchain and AI technologies for secure and transparent supply chain management solutions	Application No: 202521001908A Publication Date: 07/02/2025
3.	Dr. T. Manimaran, Mr. T. Selvaganesh, Dr. R. Saravanakumar, Dr. G. Kannan	Novel algorithm for rapid prime number factorization using quantum computing	Application No: 202341080268A, Publication Date: 22/12/2023

10. Membership in Professional societies ISTE Member : Nil

11. Awards, Recognition & Achievements :

- Recognized as a research supervisor by Anna University from 14-09-2023 to the present.
- Received the “Best Library User” award for the year 2024.

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