



**Name** : Dr. J. PRIYADHARSINI  
**Designation** : ASSISTANT PROFESSOR  
**Department** : MATHEMATICS  
**Date of Joining** : 11.08.2022  
**Phone No** : 9791652510  
**Email** : jpriyagru@gmail.com,  
[privadharsini@americancollege.edu.in](mailto:privadharsini@americancollege.edu.in)

#### EDUCATIONAL QUALIFICATION:

Degree	Subject	College/University & Place	Year Completed
Ph.D Full Time	Mathematics	The Gandhigram Rural Institute (Deemed to be University). Dindigul.	2021 (Highly Commended)
M. Phil	Mathematics	The Gandhigram Rural University. Dindigul.	2007
M. Sc.	Mathematics	Lady Doak College, Madurai	2006
B. Sc. (Spl)	Mathematics	Lady Doak College, Madurai	2004

**SPECIALISATION IN TEACHING:** Algebra, Differential equations, Probability and Statistics, Stochastic Process, Numerical methods, Operation research

**SPECIALISATION IN RESEARCH:** Fractional Differential Equations

**RESEARCH INTERESTS:** Differential Equations, Fuzzy Mathematics, Controllability

**OTHER WORK EXPERIENCE:**

Designation	Institution / University	Period	Experience Y   M	
Guest Lecture	Lady Doak College	Nov-Dec 2007		25 Days
Lecturer in Mathematics	Apollo Arts and Science College, Chennai.	18-07-2008 to 31-07-2009	1 Y	13 Days
Lecturer in Mathematics	Sree Sastha Institute of Engineering and Technology	03-08-2009 to 05-09-2013	4	1 M, 2 Days
Assistant Professor in Mathematics	Sree Sastha Engineering College	04-08-2014 to 05-05-2017	2	9 M
Guest Faculty in Mathematics	Gandhigram Rural Institute (Deemed to be University)	July-Sep 2017		3 M
Assistant Professor	The American College, Madurai	11-08-2022 to Till date		
Total Years of Experience			9 Y	7 M, 24 Days

**ARTICLES PUBLISHED IN INTERATIONAL JOURNALS:**

1. **J. Priyadharsini**, P. Balasubramaniam, Hyers-Ulam stability result for Hilfer fractional integrodifferential stochastic equations with fractional noises and non-instantaneous impulses, Evolution Equations and Control Theory 13 (2023), 173-193. (**SCI Journal– Impact Factor: 1.169**).
2. **J. Priyadharsini**, P. Balasubramaniam, Solvability of fuzzy fractional stochastic Pantograph differential system, Iranian Journal of fuzzy systems, Iranian Journal of Fuzzy Systems 19 (2022), 47-60. (**SCI Journal– Impact Factor: 2.100**). .
3. **J. Priyadharsini**, P. Balasubramaniam, Optimal control for fractional higher order

damped stochastic impulsive systems, Mathematical Methods in the Applied Sciences, 44 (2021) 5930-5952. (**SCI Journal – Wiley – Impact Factor: 2.321**).

4. **J. Priyadharsini**, P. Balasubramaniam, Controllability of fractional non-instantaneous impulsive integrodifferential stochastic delay system, IMA Journal of Mathematical Control and Information, 32 (2021), 654-683. (**SCI Journal – Oxford Academic – Impact Factor: 1.555**).
5. **J. Priyadharsini**, P. Balasubramaniam, Existence of fuzzy fractional stochastic differential system with impulses, Computational and Applied Mathematics, 39 (2020) 1-21. (**SCI Journal – Springer – Impact Factor: 2.239**).
6. **J. Priyadharsini**, T. Sathiyaraj and P. Balasubramaniam, Results on controllability of nonlinear Hilfer fractional stochastic system, International Journal of Nonlinear Science and Numerical Simulation, 20 (2019) 475-485. (**SCI Journal – De gruyter – Impact Factor: 2.007**).

#### **SCOPUS INDEXED JOURNAL**

1. **J. Priyadharsini**, P. Balasubramaniam, Multi-criteria decision making method based on interval-valued intuitionistic fuzzy sets, The Journal of Analysis, 27 (2019) 259-276.
2. **J. Priyadharsini**, V. Seenivasan and P. Senthilkumar, Stability Result For Fractional Fuzzy Neutral Integro-differential Equations, The Journal of Analysis, 1-21 (2022).

#### **BOOK CHAPTER CONTRIBUTED**

P. Balasubramaniam and **J. Priyadharsini**, Controllability of fuzzy fractional stochastic differential systems, An Essential Guide to Fuzzy Systems, **Chapter 4**. ISBN: 978-1-53616-128-1, Nova Science Publishers Inc, New York, 2020.

#### **CONFERENCE/WORKSHOP PRESENTED/ PARTICIPATED**

1. Participated in the **FDP on Advances in Materials Technology for Next Generation Manufacturing**, during Feb 01-05, 2024, organized by Department of Mechanical Engineering, Ballari Institute of Technology and Management, Ballari, Karnataka.
2. Participated in **FDP on Applications of Mathematics In Multidisciplinary Domains** during Feb 01-08, 2024, organized by Department of Mathematics, The American College with A.C.T. Academy, Tamil Nadu.
3. Participated and Presented a paper (**Fuzzy fractional stochastic differential system with non- Lipschitz coefficients**) in the **International Conference**

**on Applied and Discrete Mathematics** during Jan 22-24, 2024 at The Gandhigram Rural Institute (Deemed to be University), Gandhigram, Dindigul.

4. Participated in the **FDP on Fuzzy Mathematics: A Journey into the world of Uncertainty**, during Jan 20-24, 2024, organized by Division of Mathematics, School of Advanced Sciences, VIT Chennai.
5. Participated in the **workshop on A two-day online Hands-on workshop to Mastering Operations Research Concepts with Python Programming**, during Jan 20-21, 2024, organized by Indian Mathematics Professors Association and Infinity Research & Development Institute, Coimbatore.
6. Participated in **workshop cum Hand-on Training (online) on SPSS software for statistical Data Analysis (Basic)** during 28<sup>th</sup> Dec 2023-5<sup>th</sup> Jan, 2024, organized by Digi skills A.C.T. Academy, Tamil Nadu.
7. Participated in the **FDP on Enhance and Enable the Potential of Mathematics and Statistics**, during 2-8, Jan 2024, organized by Faculty of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur, Chennai.
8. Participated in **workshop on Matlab- Data Analysis and Visualization** during Jan 5-8, 2024, organized by Digiskills A.C.T. Academy, Tamil Nadu.
9. Participated in the **workshop on A two-day online Hands-on workshop to Mastering Fuzzy Mathematics with Python Programming**, during Dec 30-31, 2023, organized by Indian Mathematics Professors Association and Infinity Research & Development Institute, Coimbatore.
10. Participated in the **FDP on Recent Trends In Mathematics And Technology**, during Dec 22- 29, 2023, organized by Department of Mathematics, SRM TRP Engineering College, Trichy.
11. Participated in **workshop on Intellectual property Rights and Innovations**, during Dec 10, 2023 organized by A.C.T. Academy, Tamil Nadu.
12. Participated in the **Seminar on Impacts of Mergers and Acquisitions**, during Dec 23-24, 2023 organized by A.C.T. Academy, Tamil Nadu.
13. Participated in the **Lecture Series on Number Theory**, during Aug 10-13 2023 organized by Department of Mathematics, Sant Longowal Institute of Engineering & Technology, Punjab.
14. Participated in the **International Seminar on Mathematical Modeling and Turning's Pattern Formation Uncertainty**, during Sep 11-15, 2023, organized by Department of Mathematics, School of Advanced Sciences, VIT Vellore.
15. Participated in the **International Webinar on Emerging Trends in Mathematics**, during Sep 13, 2023, organized by PG and Research Department of Mathematics, Jeyaraj Annapackiam college for women, Periyakulam.
16. Participated in the **Workshop on Introduction to Matlab and its**

**Applications**, during Aug17, 2023, organized by Department of Mathematics, KPR institute of Engineering & Technology, Coimbatore.

17. Participated in the **Webinar on Computer Literacy** during Aug 9, 2023, organized by Department of Psychology, The American college, Madurai.
18. Participated in the **FDP on Mathematics in Real, Applied and Computational Domains**, during July 3-8, 2023, organized by Department of Mathematics, School of science and Humanities, Sathyabama Institute of Engineering & Technology, Chennai.
19. Participated in the **FDP on Advances in Real Analysis**, during 26-30, June 2023, organized by Division of Mathematics ,School of Advanced Sciences, VIT Chennai.
20. Participated in the **FDP on Mathematical Analysis of Fluid Transfer Mechanism and Study of Seismic Wave Behavior**, during 19-21, June 2023, organized by School of Electronics Engineering (SENSE) VIT University Chennai.
21. Participated in the **Workshop on Abstract Algebra**, during 17-18, June 2023, organized by Division of Mathematics, School of Advanced Sciences, VIT Chennai.
22. Participated in the **Workshop on Data Analytics and Machine Learning through Zero Coding**, during 17-18, June 2023, organized by Division of Mathematics, School of Advanced Sciences, VIT Chennai.
23. **Participated in the FDP on Exploring the Impact of emerging Technologies in Future Network and Systems, during 24-26, May 2023, organized by School of Electrical Engineering, VIT Chennai**
24. Participated in **National Intellectual Property Awareness Mission** on 12<sup>th</sup> May 2023, organized by Intellectual Property office, India.
25. Participated in **FDP on Real Analysis**, during 15-17, April 2023, organized by Division of Mathematics ,School of Advanced Sciences, VIT Chennai.
26. Participated and presented a paper (**Hyers-Ulam stability result for fuzzy impulsive integro-differential equations**) in the **International Conference on Discrete Mathematics and Mathematical Modelling in Digital Era** during March 23-25, 2023 at The Gandhigram Rural Institute (Deemed to be University), Gandhigram, Dindigul.
27. Participated Acted as a chair person in the **International Conference on Discrete Mathematics and Mathematical Modelling in Digital Era** during March 23-25, 2023, at The Gandhigram Rural Institute (Deemed to be University), Gandhigram, Dindigul.
28. Participated in the **FDP on Policy initiatives and Quality Enhancement in Higher education**, during 27<sup>th</sup> March- 2<sup>nd</sup> April, 2023, organized by A.C.T. Academy, Tamil Nadu in Association with Academic and Research Conglomerate (AARC) & Academic and Research Activity Group (ARAG), Chennai.
29. Participated in **FDP on Real Analysis**, during 13-17, March 2023, organized by Division of Mathematics ,School of Advanced Sciences, VIT Chennai.

30. Participated in **Lecture series on Nonlinear Dynamics and Applications**, during 13-16, March 2023, organized by Department of Mathematics, Indian Institute of Technology, Indore.
31. Participated in the **Workshop on Critical pedagogy and higher education curriculum**, during 17-18, Feb 2023, Conducted by A.C. T. Academy, in Association with The American College, Madurai.
32. Participated in **International Seminar on Applied Mathematics, on 27<sup>th</sup> February** organized by Department of Mathematics, Lady Doak College, Madurai.
33. Participated in **FDP on Real Analysis**, during 3-5, February 2023, organized by Division of Mathematics, School of Advanced Sciences, VIT Chennai.
34. Participated in the **Skill development program cum research workshop on Strategies for writing the literature review**, during 27- 28, January, 2023, conducted by A.C.T. Academy, Chennai.
35. Participated in the **Skill development program cum research workshop on MS Excel for Research Scholars**, during 20- 21, January, 2023, conducted by A.C.T. Academy, Chennai.
36. Participated in the International **workshop on Numerical analysis of ordinary and fractional differential equations**, during 27- 31, December, 2022, organized by Faculty of Mathematics, Government Tilak College, Madhya Pradesh.
37. Participated in the **FDP on Achieving Excellence in Higher Education & Research during** 26-30, December 2022, organized by A.C.T. Academy, Tamil Nadu & Academic and Research Conglomerate (AARC), Chennai.
38. Participated in the **SERB funded workshop on Nonlinear Phenomena in Mathematical Biology**, during 19-23 Dec 2022, organized by Department of Applied Sciences, ABV- Indian Institute of information Technology and management, Gwalior.
39. Participated in the international Webinar on **Innovative Analytic approach of Harmonius colouring problem in Graphs** on 23<sup>rd</sup> September 2022 organized by Department of mathematics for Excellence, Institute of Science and Humanities, SIMATS, School of Engineering, Chennai.
40. Participated in the **Faculty Orientation Programme** on 20<sup>th</sup> September 2022 organized by IQAC, The American College, Madurai.
41. Participated and presented a paper (**A study on Existence of Fuzzy Fractional Stochastic Differential System with Non-Lipschitz coefficients**) in the **International e- Conference on Fuzzy Sets & Fuzzy Logic-Generalizations and Applications** during September 6-8, 2022 Organized by Fuzzy and Rough Sets Association, Tripura.
42. Participated and presented a paper (**Stability Result for Fractional Fuzzy Neutral Integro- Differential Equations**) in the **International Conference on Mathematical Modelling, Applied Analysis and Computational Intelligence (ICMMAACI-2022)** during February 2-4, 2022 at The Gandhigram Rural Institute (Deemed to be University), Gandhigram, Dindigul.
43. Participated and presented a paper (**Stability of Hilfer Fractional Integrodifferential Stochastic with Impulses and Poisson Jump Via MNC**) in the **International Conference (online) on Mathematical Analysis and its Applications – CONIAPS XXVII-MAAPS 2021** during October 26-28, 2021 at University of Kerala.

44. Participated and Presented a paper (**Stability Result for Hilfer Fractional Integrodifferential Stochastic Equations by Fractional Noises with Non-Instantaneous Impulses**) in the **International Conference of on Mathematical Modelling and Computational Intelligence Techniques - ICMMCIT-2021** during February 10-12, 2021 at The Gandhigram Rural Institute (Deemed to be University), Gandhigram.
45. Participated and Presented a paper (**Existence of Fuzzy Fractional Stochastic Delay Differential System**) in the **International Conference of Mathematical Modelling and Scientific Computing - ICMMSC 2020** during February 19-20, 2020 at The Gandhigram Rural Institute (Deemed to be University), Gandhigram.
46. Participated and presented a paper (**Controllability of Nonlinear Neutral Fractional Impulsive Stochastic Systems with Delay and Poisson jump**) in the **International Conference of Dynamical Systems, Mathematical Modelling and Computing Techniques- ICDSMMCT 2019** during February 14-16, 2019 at The Gandhigram Rural Institute (Deemed to be University), Gandhigram.
47. Participated and presented a paper (**Existence of Fuzzy Functional Stochastic Differential Equations with impulse**) in the **National Conference on Mathematical Analysis and** during Dec 19-20, 2019 at National Institute of Technology, Trichy.
48. Participated and presented a paper (**Controllability of Fractional Impulsive Stochastic System**) in the **International Conference of Indian Society of Industrial and Applied Mathematics – IC- ISIAM 2019** during December 5-7, 2019 at Bharathiar University and Anna University Regional Campus, Coimbatore.
49. Participated in the **International Workshop on Mathematical Modelling and Scientific Computing** during 04-09-2019 to 05-09-2019 at The Gandhigram Rural Institute (Deemed to be University), Gandhigram.
50. Participated in the **International Workshop on Mathematical Modelling and Soft Computing** during April 25-27, 2018 at The Gandhigram Rural Institute (Deemed to be University), Gandhigram.
51. Participated and presented a paper (**Multi-Criteria Decision Making Method Based on Interval- Valued Intuitionistic Fuzzy Sets**) in the **International Conference on Applied Analysis, Mathematical Modelling and Computing Techniques- ICAAMMCT 2018** during March 15-17, 2018, at The Gandhigram Rural Institute (Deemed to be University), Gandhigram.
52. Participated in the **Bridge course on Mathematics** during June 29-30, 2015 at Anna University, Chennai.
53. Participated in the **International Conference on Discrete Mathematics and its Applications** on August 9, 2012 at Asan Memorial College of Engineering and Technology, Chennai.
54. Participated in the **National Conference on Mathematics, Computing & Modelling** during March 3-4, 2007, at The Gandhigram Rural University, Gandhigram.

## ACHIEVEMENTS

1. Got cash award of Rs. 2000 to produce 100% result in Resource Management Technique for IV year Computer Science Engineering in Anna University Examination during the year 2016-2017 in Sree Sastha College of Engineering, Chennai.
2. Got cash award of Rs. 1000 to produce 97% result in Statistics and Numerical Methods

for II year Mechanical Engineering in Anna University Examination during the year 2015-2016 in Sree Sashta College of Engineering, Chennai.

3. Got cash award of Rs. 1000 to produce 97% result in Probability and Statistics for II year Biotechnology Engineering in Anna University Examination during the year 2010- 2011 in Sree Sashta College of Engineering, Chennai.

#### **REVIEWER:**

Reviewer in the Journal of **Neural Processing Letters**  
Reviewer in the Journal of **Iranian Journal of Fuzzy Systems**

#### **AWARDS:**

**Best Researcher Award** by , Multiverse Honors-22

#### **COURSE COMPLETED**

**NPTEL Course- Introduction to Machine Learning with Elite certificate**

#### **MEMBER:**

Lifetime Member in **Ramanujan Mathematical Society.**

**Membership No: 1669**

#### **COMPUTER KNOWLEDGE:**

MS-Office, LaTeX Type Setting, Mat Lab

#### **RESEARCH ACTIVITIES:**

	<b>All</b>	<b>Since 2019</b>
<b>Citations</b>	45	44
<b>h-index</b>	4	4
<b>i10-index</b>	3	3

Orchid ID : <https://orcid.org/0000-0003-3446-0104>

Scopus ID: <https://www.scopus.com/authid/detail.uri?authorId=57208212501>

Google Scholar ID: <https://scholar.google.com/citations?user=jbwGtS4AAAAJ&hl=en>