

FACULTY PROFILE

Name : Dr. J. Jesintha Rosline
Designation : Assistant Professor
Qualification : M. Sc., M. Phil, Ph.D., PGDCA.
Mobile number : 9841958938
E-mail id : jesi.simple@gmail.com
jesinthamaths@auxiliumcollege.edu.in
Teaching Experience : 10 Years
Area of specialization : Fuzzy Mathematics, Decision Making, Graph Theory and
Fuzzy Graph Theory

Positions Held In Auxilium :

- Mathematics Association Staff In Charge (2020 – 2021)
- Auxilium Innovation and Incubation Centre member
- Staff Welfare Fund Coordinator
- Research Ethics, Publication & IPR committee Member
- Board of Studies Member
- Educative Community Member
- Department NIRF Staff In charge(2020 -2021)
- Faculty Organizer and Faculty Invigilator for Spoken Tutorial- IIT Bombay for I B.Sc. Mathematics.
- NIRF Member
- PARAMASH Member

Research Experience and Guidance:

List of PhD Candidates:

S. No.	Name of the Scholar	Part time/ Full time	Admitted Year	Completed Year
1.	Anthoni Amali A.	Full Time	2021	Pursuing
2.	Aruna G.	Part Time	2021	Pursuing
3.	Divya V.	Part Time	2023	Pursuing

Projects Completed / Ongoing :

Title of the Project	Name of the Funding Agency	Duration	Remarks
Seed Money Project for Alternate Quadra Sub – Merging Polar Fuzzy Soft Graph and its Mathematical Implementations.	Auxilium College(Autonomous), Vellore	2 Years	Ongoing

No. of Papers Published: 22

No. of Papers Presented in the National/ International/ Seminars/ Workshops/

Conferences: 11

No. of Seminars/Workshops/Conferences organized: 5

Responsibilities held:

- Mentor and tutor for I B.Sc. Mathematics (2019 – Till Date).
- Department NIRF coordinator for the Academic Year 2020-21.
- Mathematics Association Staff In charge for the Academic Year 2020-21.
- Faculty Organizer and Faculty Invigilator for Spoken Tutorial- IIT Bombay from 2020.
- Coordinator for the Value Added Course “Fundamentals of Data Analytics” for the Academic Year 2022-2023.

Current Responsibilities:

- Mentor and tutor for I B. Sc. Mathematics.
- Faculty Organizer and Faculty Invigilator for Spoken Tutorial- IIT Bombay for I B.Sc. Mathematics..
- Coordinator for the Value Added Course “Fundamentals of Data Analytics”.
- Coordinator for AIIC- Print Hub.
- Department Log Book In charge.

Membership in professional bodies:

- Life Time Membership in Academia for Advanced Research in Mathematics (AARM).

Other bodies:

- Membership in Nature Science Foundation(NSF).

Honors & awards received:

- “REV. FR. RACINE S.J., AWARD” for the best Researcher in the Academic Year 2015 – 2016.

No. of Online Courses Completed : 4

Served as a Resource Person/Chair Person:

1. Guest Lecture in “Workshop on Mathematical Applications” (Resource Person) on the topic “Fuzzy Graph Theory and its Application” organized by the PG and Research Department of Mathematics, St. Joseph’s College, Kudallore on 24th and 25th February, 2017.
2. Special Guest lecture on “Role of Fuzzy Sets in Graph” (Resource Person) organized by the Department of Mathematics, DKM College for Women, Sainathapuram, Vellore on 1st March, 2021.
3. Special Guest lecture in Mathematics Association on the topic “Role of Graphs and Fuzzy Graphs in Networking” (Resource Person) organized by the PG and Research Department of Mathematics, KMG College of Arts and Science College, Gudiyattam on 12th April, 2022.
4. Special Guest Lecture in “Mathigon” (Resource Person) organized by Srishti School, Vellore on 2 Dec, 2022.
5. Special Guest Lecture in “International Conference on Mathematical Sciences and Applications(ICMA '23)” (Resource Person) on the topic “Application of Fuzzy Graphs in Networking” organized by PG and Research Department of Mathematics, Sacred Heart College(Autonomous), Tirupattur on 24th and 25th March, 2023.
6. Special Guest Lecture in the Inauguration of “Maths club” (Resource Person) on the topic “Math, well obtuse you” Organized by the BHAGWAN MAHAVEER DAYANIKETAN JAIN SCHOOL, Vellore on 6th July, 2023.
7. “International Conference on Mathematical Sciences and Applications(ICMA '23)” (Session Chair Person) organized by PG and Research Department of Mathematics, Sacred Heart College(Autonomous), Tirupattur on 24th and 25th March, 2023.

Programme Organized/Organizing Committee member:

1. Two Day Online “National Seminar on Recent Topics in Mathematics” (Organizing Secretary) organized by Department of Mathematics Auxilium College(Autonomous), Vellore on 28th and 29th May, 2020.
2. Webinar on “Emerging Topics in Mathematics” (Organizing Secretary) organized by Department of Mathematics Auxilium College(Autonomous), Vellore on 1st October, 2021.
3. National Seminar on “Emerging Recent Trends in Applied Mathematics – 2023” (Organizing Secretary) conducted by the Department of Mathematics, Auxilium College(Autonomous), Vellore on 1st September, 2023.
4. Webinar on “Intellectual Property Rights” (Organizing Secretary) organized by the IQAC, Committee for Research Ethics, Publication and IPR on 25th January, 2022.
5. Webinar on “Recent Trends in Mathematics” (Organizing Committee Member) organized by Department of Mathematics Auxilium College(Autonomous), Vellore on 1st Dec, 2021.
6. Webinar on “Developing Mathematical Thinking” (Organizing Committee Member) organized by PG and Research Department of Mathematics Auxilium College(Autonomous), Vellore on 27th January, 2022.
7. “Young Innovators Day” (Organizing Committee Member) organized by Research and Publication Committee and Centre for Innovation and Business Incubation on 23rd March, 2022.
8. “Intercollegiate Paper Presentation” (Organizing Committee Member) organized by the Committee for Research Ethics, Publication and IPR on 20th October, 2022.
9. Webinar on “Awareness on Intellectual Property Rights” (Organizing Committee Member) organized by the IQAC, Committee for Research Ethics, Publication and IPR in collaboration with NIPAM on 20th Feb, 2023.
10. “Young Innovators Day” (Organizing Committee Member) organized by the Committee for Research Ethics, Publication and IPR, and Tamil Nadu Science Forum, Auxilium College branch on 28th Feb, 2023.

11. Webinar on “Publish and Progress” (Organizing Committee Member) organized by IQAC, Committee for Research
12. Research Ethics, Publication and IPR & Library , Auxilium College(Autonomous), Vellore- 6 on 26th August 2023.
13. Webinar on “Awareness on Intellectual Property Rights” (Organizing Committee Member) organized by the Committee for Research Ethics, Publication and IPR in collaboration with NIPAM on 16th September, 2023.

PUBLICATIONS

Publications in Journals

1. Jesintha Rosline J., and Pathinathan T., ”A Study on Stress Experienced by students and teachers in professional courses using Induced Linked Fuzzy Relational Mapping(ILFRM) Analysis ”, *International journal of computing algorithm*, ISSN: 2278-2397, June 2013, Vol. 02, Issue 1, pp. 40-42.
2. T. Pathinathan and J. Jesintha Rosline, “Characterization of fuzzy graphs into different categories using arcs in fuzzy graph”, *Journal of Fuzzy set valued analysis*, ISSN:2193-4169, 2014 (2014), pp. 1-6.
3. T. Pathinathan and J. Jesintha Rosline, “Double layered fuzzy graph”, *Annals of Pure and Applied Mathematics*, ISSN: 2279-087X (P), 2279-0888 (O) 2014, Vol. 8, Issue 1, pp. 135-143.
4. T. Pathinathan and J. Jesintha Rosline, “Matrix Representation of Double layered fuzzy graph and its properties”, *Annals of Pure and Applied Mathematics*, ISSN: 2279-087X (P), 2279-0888(O), 2014, Vol. 8, Issue 2, pp. 51 – 58.
5. T. Pathinathan and J. Jesintha Rosline, “Vertex degree of Cartesian product of Intuitionistic fuzzy graph”, *International Journal of Scientific and Engineering Research* ISSN 2229-5518, March 2015, Vol. 6, Issue 3, pp. 224 – 227.
6. J. Jesintha Rosline and T. Pathinathan, “Intuitionistic Double Layered Fuzzy Graph and its Cartesian Product Vertex Degree” *International Journal of Computing Algorithm*, ISSN: 2278 – 2397, 2015, Vol. 4, pp. 1374 – 1378.

7. J. Jesintha Rosline and T. Pathinathan, "Intuitionistic Double Layered Fuzzy Graph", *ARNP Journal of Engineering and Applied Sciences*, ISSN 1819-6608, 2015, Vol. 10, Issue 12, pp. 5413- 5417.
8. J. Jesintha Rosline and T. Pathinathan "Structural Core Graph of Double Layered Fuzzy Graph", *International Journal of Fuzzy Mathematical Archive*, ISSN: 2320-3242(P), 2320-3250(O), 2015, Vol. 8, Issue 2, pp. 59-67.
9. T. Pathinathan, J. Jon Arockiaraj and J. Jesintha Rosline, "Hesitancy Fuzzy Graphs" *Indian Journal of Science and Technology*, ISSN: 0974-6846(P), 0974-5645(O), 2015, Vol. 8, Issue 35, pp. 1-5.
10. J. Jesintha Rosline, J. Jon Arockiaraj and Regina B, "Intuitionistic Double Layered Fuzzy Planar Graph", *International Journal of Current Advanced Research*, ISSN: 2319-6505(P), 2319-6475(O), 2018, Vol. 7, Issue 1, pp. 69 – 75.
11. J. Jesintha Rosline and E. Mike Dison, "Symmetric Pentagonal Fuzzy Numbers", *International Journal of Pure and Applied Mathematics*, ISSN: 1311-8080 (P), 1314-3395 (O), 2018, Vol. 119, Issue 9, pp. 245-253.
12. J. Jesintha Rosline and T. Pathinathan, "Different types of products on Hesitancy Fuzzy Graphs", *International Journal of Pure and Applied Mathematics*, ISSN: 1311-8080 (P), 1314-3395 (O), 2018, Vol. 119, Issue 9, pp. 255-265.
13. A. Kirupa and J. Jesintha Rosline, " Domination in double layered fuzzy graphs", *AIP Conference Proceedings*, 0094-243X (P) 1551-7616 (O) 2019, Vol. 020117, pp. 1-7.
14. A. Kirupa, J. Jesintha Rosline and T. Pathinathan, "Balanced k-Partitioned Fuzzy Graph", *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*, ISSN: 2278-3075 (O), 2019, Vol 9, Issue 2, pp. 269 – 275.
15. Anthoni Amali A. and J. Jesintha Rosline, "Oscillating Polar Fuzzy Graph(OPFG) and its Applications" *AIP Conference Proceedings* 2842, ISSN: 0094-243X (P) 1551-7616 (O), 2023, pp. 1-18.
16. G. Aruna and J. Jesintha Rosline, "Prism Fuzzy Number and Its Applications", *AIP Conference Proceedings* 2842, ISSN: 0094-243X (P) 1551-7616 (O), 2023), pp.1-19.
17. Anthoni Amali A. and J. Jesintha Rosline, "Alternate Quadra Sub - Merging Polar Fuzzy Soft Graph and its Application", *Reliability: Theory & Applications*, ISSN: 1932-2321, 2023, Vol. 18, Issue 3(74), pp. 97 – 112.

18. G. Aruna and J. Jesintha Rosline, “Quadrasophic Fuzzy Sets and its applications in OCD decision making”, *Journal of Propulsion Technology*, ISSN : (1001-4055), 2023, Vol.44, Issue 4, pp. 3241-3258.
19. Anthoni Amali A. and J. Jesintha Rosline, “Augmentation on Alternate Quadra Submerging Polar Fuzzy Graph and its Application” *Journal of Propulsion Technology*, ISSN : (1001-4055), 2023, Vol.44, Issue 4, pp. 8029 – 8049.
20. G. Aruna and J. Jesintha Rosline, “Properties of Quadrasophic Fuzzy Set and its Applications” *Reliability: Theory & Applications*, ISSN: 1932-2321, 2023, Vol. 18, Issue 4(76), pp. 208 – 220.
21. Anthoni Amali A. and J. Jesintha Rosline, “Operations on Alternate Quadra – Submerging Polar (AQSP) Fuzzy Graphs and its Applications”, *Trends in Mathematics(Springer)*, ISSN 2297-0215 (P), 2023, Accepted for Publication
22. G. Aruna and J. Jesintha Rosline, “Neutral – Bipolar Fuzzy Sets and its Applications”, *Trends in Mathematics (Springer)*, ISSN 2297-0215 (P), 2023, Accepted for Publication.

FDP’s/ Seminars/ Workshops/Webinars

1. “Workshop on Graph Theory” organized by the Department of Mathematics, Stella Maris College on 18th and 19th Dec, 2007.
2. A short term course on “Optimization Theory & Practice”, organized by the Department of Mathematics, Stella Maris College on 15th , 17th , 27th and 28th Dec, 2007.
3. “One Day National Level Workshop on LATEX” Organized by Department of Mathematics, Jeppiaar Institute of Technology on 25th March, 2015.
4. “Short Term Training Programme on Numerical Methods and Their Applications(STTP – 2016)” Organized by the Department of Mathematics, Faculty of Science and Humanities, SRM University, Kattankulathur on 4th and 5th Nov, 2016.
5. “Workshop on Applications of Mathematics in Engineering(WAME – 2019)” Organized by the Department of Mathematics, Faculty of Science and Humanities, SRM University, Kattankulathur on 2nd and 3rd March, 2019.
6. “International Conference on Integrated Knowledge Towards Enriched Society” Organized by Loyola Racine Research Institute of Mathematics and Computer Science, Loyola College, Chennai- 34. held on 22nd and 23rd January, 2020.

7. “National Conference on Teaching, Learning and Evaluation: Changes and Challenges” Organized by IOAC, Auxilium College(Autonomous), Vellore on 30th & 31st January, 2020.
8. Two Weeks FDP on “Managing Online Classes and Co-Creating MOOCS” organized by Teaching Learning Centre, Ramanujan College, University of Delhi from 20th April to 6th May, 2020.
9. One Week National Faculty Development Program and Online Training on “LATEX” organized by Sanjay Ghodawat University, Kolhapur in association with Spoken Tutorial Project, IIT – Bombay from 27th April to 2nd May, 2020.
10. One Week National Faculty Development Program “R Language” organized by PG and Research Department of Mathematics Auxilium College(Autonomous), Vellore in association with Spoken Tutorial Project, IIT – Bombay from 13th to 20th May, 2020.
11. One day Online Workshop for “Enhancing Research Communication Skills through Science Direct and Mendeley” organized by IQAC and SoE, Faculty of Education, Dayalbagh Educational Institute, Agra on 3rd May, 2020.
12. One week Faculty Development Programme on “ Open Source Tools for Research” organized by Teaching Learning Centre, Ramanujan College, University of Delhi from 8th to 14th June, 2020.
13. One week International Faculty Development Programme(online) on “Evolving Best Teaching and Learning Practices in the Pandemic Era 2020” organized by the Board of Management, Auxilium College(Autonomous), Vellore from 15th to 21st June, 2020.
14. “Basic Author Workshop Research Article Writing and Reference Management Using Mendeley” Organized by Faculty of Science, Annamalai University on 22nd June, 2020.
15. “IP Awareness/ Training Program” organized by National Intellectual Property Awareness Mission on 25th January, 2022.
16. UGC – Sponsored Live “Online Induction Programme” conducted by UGC – Human Resource Development Centre, University of Kerala, Kariavattom on 28th and 29th March, 2022.
17. Two days “In-Service Teacher Training Programme” in Mathematics held at Muthurangam Government Arts College(Autonomous), Vellore held on 05th and 06th May, 2022.

18. Libre office suite calc 6.3, Libre office suite writer 6.3 and Libre office suit Impress 6.3 conducted by spoken tutorial project IIT ,Bombay (FDP) from 26th May, 2022 to 10th June, 2022 .
19. FDP on “Microsoft Power BI Data Analyst Associate” organized by ICT Academy on 20th June, 2022 to 24th June, 2022 at Auxilium College, Vellore -6.
20. Webinar on “Application of mathematics” conducted by Department of mathematics Auxilium College, Vellore on 17th September 2022
21. Two days Faculty Development Program on “E - Content Development Hand on training session on OBS and OPS Software” organized by the Department of Communication Media, Auxilium College(Autonomous), Vellore- 6 on 15th and 17th October, 2022.
22. Special Guest Lecture in “State Level Seminar” on the topic “Evaluation of Mathematics to Fuzzy Mathematics” organized by PG and Research Department of Mathematics, C. Abdul Hakeem College, (Autonomous), Melvisharam on 19th July, 2023.
23. One Day Workshop on “NIRF Ranking 2024” Human Resource Development Centre, Thiruvalluvar University, Sekkadu on 4th October, 2023.