

## FACULTY PROFILE

**Name** : Dr. L. Sujatha

**Designation** : Assistant Professor and Head,  
PG & Research Dept. of Mathematics

**Qualification** : M.Sc., M.Phil., Ph.D.,

**Mobile Number** : 9486384320

**E-mail id** : [sujathal@auxiliumcollege.edu.in](mailto:sujathal@auxiliumcollege.edu.in)

**Teaching Experience** : 21 years

**Area of Specialization** : Fuzzy Set Theory and its Applications

### Research Experience and Guidance:

Degree	Title of Work / Thesis	University where the work was carried out	Year of Completion
Ph. D. Mathematics	A Study on Optimization Problems and their Applications under Fuzzy Environment	Thiruvalluvar University, Vellore	2017

### List of Ph.D. Scholars:

S. No.	Scholar name	Date of Registration
1.	Ms. Shakila V. (Pursuing)	10.07.2023

### List of M.Phil. Scholars:

Number of M.Phil. Students guided: 18		
S. No.	Batch	Name of the M.Phil. Scholar
1.	2011-2012	Ms. C. Divya
2.		Ms. S. Karpagam
3.		Ms. A. Sarthaj
4.		Ms. V. Sathiya

5.	2012-2013	Ms. K. Gayathri
6.		Ms. S.V. Kanimozhi
7.		Ms. S. Malathi
8.		Ms. P. Nalini
9.	2014-2015	Ms. N. Anitha
10.		Ms. K. Bharathi
11.		Ms. R. Chitra
12.	2015-2016	Ms. M. Abirami
13.		Ms. P. Anjali
14.		Ms. G. Shakila
15.		Ms. M. Vijayalakshmi
16.	2016-2017	Ms. J. Daphene Hyacinta
17.	2017-2018	Ms. P. Vinothini
18.	2018-2019	Ms. S. Kalaivani

**No. of Papers Published: 35**

**No. of Book Chapters Published: 1**

**No. of Papers Presented in the National/ International/ Seminars/ Workshops/ Conferences: 27**

**No. of Seminars/Workshops/Conferences organized: 14**

- No. of programs organized through offline and online modes: 12
- Team members in organizing the program: 4

**No. of Programs organized through the Mathematics Association: 12**

- No. of Invited Talks: 8
- No. of Workshops: 4

**No. of National/International/Seminars/ Workshops/Conferences/Congress/ Symposium/ Endowment Lecture/Conclave participated: 43**

- Programmes - participated through offline mode: 29
- Programmes - participated through online mode: 14

**No. of Faculty Development Programs attended: 16**

- No. of Offline Participation in FDP: 03
- No. of Online Participation in FDP: 13

**Responsibilities held:**

- Team member for preparing course material for Value Education (2008-2010)
- Member of Educating Community (2010-2011)
- Dean of Science (2010-2013)
- Member of Research Cell - Research and Publication Committee (2015-2021)
- In charge of the Staff welfare fund – Shift II (2017-2021)
- Member - DST-FIST Project Committee (2018-2020)
- Staff In Charge of Mathematics Association (2016-2017)
- Member of the Board of Studies for
  - PG Mathematics (2007-2018)
  - M.Phil. Mathematics (2012-2018)
- Chairman of M.Phil. Board of Studies (2018-2020)
- Chief Examiner for
  - UG Mathematics valuation (2012-2018)
  - M.Phil. Mathematics valuation (2018-2020)
- Coordinator to organize the Classical dance programme for Madha TV in the Academic year 2018-2019.
- Co-ordinator for the Course Disaster Management in the Academic year 2019-2020 for 17 M.Phil. students (9 English, 2 Mathematics, 3 Computer Science, 2 Commerce & 1 Management)
- Tutor
- Mentor for the students of B.Sc. and M.Sc. Mathematics

**Current Responsibilities:**

- Head - PG and Research Dept. of Mathematics (2018-till date)

- Co-ordinator of Spoken-Tutorial Project – IIT Bombay for Auxilium College (2021-till date)
- Chairman of PG Board of Studies -Mathematics (2018-till date)
- Member of UG Board of Studies – Mathematics (2007-till date)
- Mentor for the students of M.Sc. Mathematics

**Membership in professional bodies:**

- A Life-Time Member of IAENG [International Association of Engineers (Member Number:130290)]
- A Life-Time Member of the Association of Science, Education, and Technology
- A Life-Time Member of INAAR [International Association of Academicians and Researchers]
- A Life Time Member of Senior member of the American Society of Research (ASR Member Number: R2170161501)
- A Life Time Member of Academia for Advanced Research in Mathematics Society (AARM Membership No: F20170) (Reg. No. SRG/Vellore/96/2019)
- A Life Time Member of Academic & Research Conclave from 2022-23. (MSME Registration No: UDYAM-TN-03-01015425, Coimbatore, Tamilnadu, India.
- Appointed as a member of the reconstituted Board of Studies in Mathematics (PG), Thiruvalluvar University for a period of three years from 15.06.2023 to 14.06.2026. (No.TU/R/Recon. of BOS/2023/7642 dated: 23.06.2023)
- Nominated as a University Nominee to serve as a member of the Board of Studies in Mathematics of Marudhar Kesari Jain College for Women (Autonomous), Chinnakallupalli, Vaniyambadi - 635751 for a period of three years from 20.02.2024 to 19.02.2027. (No.TVU/R/BOS/Uni. Nominee/2024/9529.M dated: 20.02.2024)

**Membership in other bodies:**

- Member of the Nature Science Foundation (NSF).
- A Member of the All India Psychology Academy (AIPA)

### **Honors & Awards received:**

- Received **PARA AWARDS – 2020 for Best Professor** from Puducherry Academic Researchers Association (A Unit of Benevolent Trust), Regd. No. 399/2011 on 04.01.2020.
- Received **Adarsh Vidya Saraswati Rashtriya Puraskar (National Award of Excellence 2020)** on 20.02.2020 from Glacier Journal Research Foundation-Global Management Council, Ahmedabad.
- **Co-ordinator for STP, IIT Bombay online course:**
  - Dr. L. Sujatha received a **letter of Appreciation** on **09.03.2021**, for conducting training (R & JAVA) for the I & II M.Sc. students of Mathematics, Auxilium College (Autonomous), Vellore in association with STP-IIT Bombay in the month of February 2021.
  - Auxilium College won the **Spoken Tutorial National Academic Excellence Award** for outstanding contribution to organizing training and spreading awareness on FLOSS/MOOCs. On behalf of Auxilium College, received the award along with the Principal Dr. (Sr.) Jaya Santhi at the "**National Level Conclave on Spoken Tutorial Teaching-Learning Best Practices & Award Ceremony 2022**" in the Victor Menezes Convention Centre (VMCC), IIT Bombay, Mumbai, Maharashtra on **27<sup>th</sup> August 2022**.
  - Dr. L. Sujatha received a **letter of Appreciation** on **01.11.2022**, for spreading awareness and holding Software Training workshops at Auxilium College (Autonomous), Vellore during the academic session **2021-2022**.
  - Dr. L. Sujatha received a **letter of Appreciation** on **11.07.2023**, for spreading awareness and holding Software Training workshops at Auxilium College (Autonomous), Vellore during the academic session **2022-2023**.
  - Auxilium College (Autonomous), Vellore, received a **Certificate of Appreciation** for functioning as Spoken Tutorial, IIT Bombay's Nodal Resource Centre (NRC) for the Vellore region and successfully conducted IT Skill course Training on "LibreOffice Suite Writer 6.3" for the students of Arcot Sri Mahalakshmi Women College, Vilapakkam in the academic year **2022-2023**.

**No. of Online Courses completed (Minimum of 4 Weeks): 1**

- 5 weeks **online course** on “English for Career Development” offered through Coursera.

**Served as a Technical Program Committee member:**

- Technical Program Committee member of the 11<sup>th</sup> **International Conference** on Computational Intelligence and Software Engineering (CiSE 2019) held on January 5-7, **2019** in **Bangkok, Thailand**.

<https://www.janconf.org/conference/OrganizingCommittee.aspx?id=1076>

- Technical Program Committee member of the 3<sup>rd</sup> **International Conference** on Operations Research and Fuzziology (ORF 2019) held on July 19-21, **2019** in **Guilin, China**. <https://www.confjuly.org/conference/OrganizingCommittee.aspx?id=1133>

**Served as an Editorial Board Member:**

- Nominated Member of the **Editorial Board of Glacier Journal of Scientific Research, Ahmedabad** on **20.02.2020**. ISSN: 2349-8498, Impact Factor: 2.7614.

**Served as a Conference Advisory Committee Member:**

- International Conference on “Mathematical Innovative Techniques and their Applications”, organized by Puducherry Academic Researchers Association (A Unit of Benevolent Trust), Regd. No. 399/2011, held on **9<sup>th</sup> May 2021**.
- International Conference on “Recent Trends on Multidisciplinary – Innovative Techniques & their Applications”, organized by Puducherry Academic Researchers Association (A Unit of Benevolent Trust), Regd. No. 399/2011, held on **16<sup>th</sup> May 2021**.

**Served as a Reviewer & Advisory Committee Member of the Journal:**

- **Reviewer of International Journal** of Research and Analytical Reviews (IJRAR) Referral Management System (RMS) (E-ISSN 2348-1269, P-ISSN 2349-5138) holding Member ID: 114506 from **5<sup>th</sup> March 2019**.

- **Advisory Committee Member:** Studies in Indian Place Names, Multidisciplinary **UGC Care Listed Journal** Recent Innovations in Management, Science and Humanities. ISSN: 2394-3114, Vol. 40, Issue 45, **March 2020-03-14.**

**Served as a Reviewer for the following Journals:**

**Total number of articles reviewed for 11 Journals: 24**

1. Reviewed **1 article** for Springer in the Journal of Mathematical Modelling and Algorithms in Operations Research.
2. Reviewed **2 articles** for the British Journal of Applied Science and Technology.
3. Reviewed **2 articles** for the Journal of Basic and Applied Research International.
4. Reviewed **3 articles** for the Journal of Applied Mathematics and Physics (JAMP)
5. Reviewed **6 articles** for the Journal of Advances in Mathematics and Computer Science
6. Reviewed **4 articles** for the Asian Research Journal of Mathematics
7. Reviewed **1 article** for the Asian Journal of Current Research
8. Reviewed **2 articles** for the Asian Journal of Mathematics and Computer Research
9. Reviewed **1 article** for the Journal Springer – Trends in Mathematics
10. Reviewed **1 article** for the Far East Journal of Mathematical Sciences (FJMS)
11. Reviewed **1 article** for the Asian Journal of Probability and Statistics

**Served as a Chairperson for the following Conferences:**

1. Chairperson of the paper presentation session in the “**National Conference** on Discrete Mathematics and its Applications (NCDMA – 2018)”, organized by the Department of Mathematics, **Sacred Heart College (Autonomous), Tirupattur**, on February 9<sup>th</sup> and 10<sup>th</sup>, **2018.**
2. Chairperson of the paper presentation session in the Two Day “**International Conference** on Mathematical Computer Engineering (ICMCE-2018)”, organized by Mathematics Division, School of Advanced Sciences (SAS), **VIT, Chennai**, on November 23-24, **2018.**
3. Chairperson of the paper presentation session in the Two Day “**International Conference** on Mathematical Computer Engineering (ICMCE-2020)”, organized by Mathematics Division, School of Advanced Sciences (SAS), **VIT, Chennai**, on February 21-22, **2020.**

**Served as a Resource Person for the following Programmes:**

1. Delivered a “Motivational Talk to the teachers” (In-service Training for Social Science/Mathematics Teachers), organized by RASHTRIYA MADHYAMIK SHIKSHA ABHIYAN (RMSA) on 2<sup>nd</sup> August **2017**.
2. Delivered an Invited talk on “A special fuzzy set and its Application”, organized by the PG and Research Dept. of Mathematics, Sacred Heart College, Tirupattur on 29<sup>th</sup> January **2018**.
3. Delivered a talk on “Applications of Fuzzy Set in Operations Research” in the “**National level Seminar on Modern Techniques in Mathematical Modeling and Operations Research**”, organized by PG and Research Department of Mathematics and Department of Statistics, Marudhar Kesari Jain College for Women, Vaniyambadi on 6<sup>th</sup> September 2019.
4. Delivered a talk on “Fuzzy Numbers and their Applications” in the “**State level Seminar on Fuzzy Numbers and their Applications**”, organized by PG and Research Department of Mathematics, K.M.G College of Arts and Science, Gudiyattam on 3<sup>rd</sup> October **2019**.
5. Delivered an invited talk in the **National Webinar** on “Fuzzy set theory and its Applications”, organized by the Dept. of Mathematics, Little Flower Degree College, Uppal, Hyderabad 22<sup>nd</sup> May 2020.  
Zoom Link:  
<https://us02web.zoom.us/j/85106363782?pwd=RUZkQlZiSy9JK3kzblp4QStOcVFCQT09>
6. Delivered a talk on “Fuzzy Mathematics” and “Co-Existence with Nature & Humanity – Build back a better future” in the **Mathematics Association Inauguration**, organized by the Dept. of Mathematics, Nirmala College for Women, Coimbatore 641 018 on 18<sup>th</sup> Aug 2020. Google Meet: <https://meet.google.com/cok-hhbm-pky>
7. Delivered an invited talk in the One Week **International Online Faculty Development Program** on “Recent Trends and Applications in Mathematics (IFDPRTAIM-2020), organized by the Dept. of Mathematics, Little Flower Degree College, Uppal, Hyderabad 14<sup>th</sup> September 2020. Google Meet Link: <https://meet.google.com/hsf-nygq-vsg>

8. Delivered a talk on “Fuzzy Relations and its Applications”, organized by PG and Research Department of Mathematics, Research Forum Sacred Heart College (Autonomous), Tirupattur – 635 601 28.10.2020. Google Meet Link: <https://meet.google.com/dmt-obpt-apk>
9. Delivered a talk on “Fuzzy Sets and Models of Decision Making” in a **Two-Day Lecture Workshop** on “Applications of Mathematics”, organized by Aurora’s Degree & P.G College, Hyderabad, Telangana-506009 on 24.11.2020.  
Google Meet Link: [meet.google.com/rjb-sxpz-ffk](https://meet.google.com/rjb-sxpz-ffk)
10. Delivered an invited talk in the **Webinar** on “Fuzzy Set Theory”, organized by PG & Research Dept. of Mathematics, St. Joseph’s College of Arts and Science (Autonomous), Cuddalore on 31.03.2021. Google Meet Link: <https://meet.google.com/qxx-ahyg-bzw>
11. Delivered an invited talk in the **Seminar** on “Fuzzy Set Theory and its Applications”, organized by the Dept. of Mathematics, Sree Abiraami Arts and Science College for Women, Gudiyatham-635803 on 18.08.2023.
12. Delivered an Invited talk at the **National Conference** on “Recent Trends in Applied Mathematics – RTAM 2023”, organized by PG and Research Dept. of Mathematics, K.M.G. College of Arts and Science, Gudiyatham on 15.09.2023.

### **Paper Publications:**

**No. of Papers Published in the Journal: 35**

1. **L. Sujatha** and R. Sattanathan, “Fuzzy shortest path problem based on triangular density function”, International Journal of Ultra Scientist of Physical Sciences, Vol. 21, No. 3, pp. 731-738, **2009**. ISSN: 0970-9150
2. **L. Sujatha** and R. Sattanathan, “Fuzzy shortest path problem based on triangular L-R type fuzzy number using Acceptability index”, International Journal of Engineering and Technology, Vol. 6, No. 4, pp. 575-578, **2009**. ISSN: 1812-7711
3. **L. Sujatha** and R. Sattanathan, “Fuzzy shortest path problem based on Interval numbers”, International Journal of fuzzy systems and rough systems, Vol. 2, No. 2, pp. 57-60, **2009**. ISSN: 0974-858X

4. **L. Sujatha** and R. Sattanathan, “Fuzzy shortest path problem based on similarity degree using L-R type fuzzy numbers”, International Journal of Computational Intelligence Research and Applications, Vol. 3, No.2, pp. 213 -216, **2009**. ISSN: 0973-6794
5. **L. Sujatha** and R. Sattanathan, “Fuzzy longest path problem in an acyclic digraph”, International Review of fuzzy mathematics, Vol. 4, No. 1-2, pp. 1-9, **2009**. ISSN: 0973-4392
6. **L. Sujatha** and R. Sattanathan, “Fuzzy shortest path problem based on similarity degree using trapezoidal fuzzy number”, Journal of Computer and Mathematical Sciences, Vol. 2, No. 6, pp. 820-826, **2011**. ISSN: 0976- 5727
7. **L. Sujatha** and S. Elizabeth, Fuzzy Shortest Path Problem based on Similarity Degree”, Applied Mathematical Sciences, Vol. 5, No. 66, pp. 3263 – 3276, **2011 (Scopus Indexed)**. EID: 2-s2.0-82255166879. ISSN: 1312-885X
8. S. Elizabeth and **L. Sujatha**, “Fuzzy Shortest Path Problem based on Index Ranking”, Journal of Mathematics Research, Vol. 3, No. 4, pp. 80-88, **2011**. ISSN: 1916-9795(print).
9. S. Elizabeth and **L. Sujatha**, “Fuzzy Shortest Path Problem based on  $\alpha$ - cut”, Journal of Science, Technology and Management, Vol. 4, No. 4, pp. 23- 33, **2012**. ISSN: 0974-8334
10. S. Elizabeth and **L. Sujatha**, “Fuzzy Shortest Path Problem based on level  $\lambda$ - triangular LR fuzzy numbers”, Advances in Fuzzy Systems, Vol. 2012, 6 pages, **2012 (Scopus Indexed)**. EID: 2-s2.0-84856411198. DOI: 10.1155/2012/646248. ISSN: 1687-7101
11. S. Elizabeth and **L. Sujatha**, “k- stage Fuzzy Transportation Problem based on Interval Valued Fuzzy Numbers”, International Journal of Scientific and Engineering Research, Vol. 3, Issue 11, pp. 155-162, **2012**. ISSN: 2229-5518
12. S. Elizabeth and **L. Sujatha**, “Fuzzy Travelling Salesman Problem”, International Journal of Applied Mathematics, Vol. 28, Issue 2, pp. 1236-1241, **2012**. ISSN: 2051-5227
13. S. Elizabeth and **L. Sujatha**, “Fuzzy Critical Path Problem for Project Network”, International Journal of Pure and Applied Mathematics, Vol. 85, No. 2, pp. 223 – 240, **2013 (Scopus Indexed)**. EID: 2-s2.0-84877962458. DOI: 10.12732/ijpam.v85i2.4. ISSN: 1311-8080

14. S. Elizabeth and **L. Sujatha**, “Application of Fuzzy Membership Matrix in Medical Diagnosis and Decision Making”, Applied Mathematical Sciences, Vol. 7, No. 127, pp. 6297 – 6307, **2013 (Scopus Indexed)**. EID: 2-s2.0-84889582139. DOI: 10.12988/ams.2013.38485. ISSN: 1312-885X (print)
15. S. Elizabeth and **L. Sujatha**, “Critical Path Problem under Fuzzy Environment”, International Journal of Computer Applications, Vol. 75, No.1, pp. 7 -11, **2013**. ISSN: 0975-8887
16. S. Elizabeth and **L. Sujatha**, “On Searching Shortest Path in a Classical Network with Fuzzy Edge Weights”, Mathematical Sciences, International Research Journal, Vol. 3, Issue 2, pp. 568-574, **2014**. ISSN: 2278-8697
17. S. Elizabeth and **L. Sujatha**, “Medical Diagnosis based on Interval Valued Fuzzy Number Matrices”, Annals of Pure and Applied Mathematics, Vol. 7, No. 1, pp. 91 – 96, **2014**. ISSN: 2279-087X(print)
18. S. Elizabeth and **L. Sujatha**, “Fuzzy Shortest Path Problem based on Interval Valued Fuzzy Number Matrices”, International Journal of Mathematical Sciences and Engineering Applications, Vol. 8, No. 1, pp. 325 – 335, **2014**. ISSN: 0973-9424
19. S. Elizabeth and **L. Sujatha**, “Fuzzy Shortest Path Problem based on Level  $\lambda$ - LR Type Representation of Fuzzy Interval”, Far East Journal of Mathematical Sciences, Vol. 93, No. 1, pp. 43- 63, **2014 (Scopus Indexed)**. EID: 2-s2.0-84926335012. ISSN: 0972-0871
20. S. Elizabeth and **L. Sujatha**, “Fuzzy Longest Path Problem for Project Scheduling”, Advances in Fuzzy Sets and Systems, Vol. 17, No. 1, pp. 1-25, **2014**. ISSN: 0973-421X
21. **L. Sujatha** and S. Elizabeth, “Fuzzy One Point Method for Finding the Fuzzy Optimal Solution for FTP and FUAP”, International Journal of Fuzzy Mathematical Archive, Vol. 6, No. 1 &2, pp. 35 – 44, **2015**. ISSN: 2320-3242(print)
22. S. Elizabeth and **L. Sujatha**, “Project Scheduling Method using Triangular Intuitionistic Fuzzy Numbers and Triangular Fuzzy Numbers”, Applied Mathematical Sciences, Vol. 9, No. 4, pp. 185 – 198, **2015 (Scopus Indexed)**. EID: 2-s2.0-84922554182. DOI: 10.12988/ams.2015.410852. ISSN: 1312-885X (print)
23. S. Elizabeth and **L. Sujatha**, “Fuzzy Project Network for Management Science”, International Journal of Pure and Applied Mathematics, Vol. 101, No.5, pp. 631-640, **2015 (Scopus Indexed)**. EID: 2-s2.0-84934325411. ISSN: 1311-8080

24. S. Elizabeth, M. Abirami and **L. Sujatha**, “Finding Critical Path in a Project Network under Fuzzy Environment”, Mathematical Sciences, International Research Journal (MSIRJ), Vol. 5, Special Issue 1, pp. 31-36, March **2016**. ISSN: 2278-8697. <https://www.imrfjournals.com/msirj5s1>
25. S. Elizabeth, **L. Sujatha** and P. Anjali, “Fuzzy zero point Method for finding the fuzzy objective value for UFTP”, Global Journal of Pure and Applied Mathematics (GJPAM), Vol. 12, No. 3, Special Issue, pp.817-823, **2016**. ISSN: 0973-1768
26. **L. Sujatha** and J. Daphene Hyacinta, “The shortest path problem on networks with intuitionistic fuzzy edge weights”, Global Journal of Pure and Applied Mathematics (GJPAM), Vol. 13, No. 7, pp. 3285-3300, **2017**. ISSN:0973-1768. [https://www.ripublication.com/gjpam17/gjpamv13n7\\_38.pdf](https://www.ripublication.com/gjpam17/gjpamv13n7_38.pdf)
27. **L. Sujatha** and J. Daphene Hyacinta, “Application of Triangular Fuzzy Membership Matrix in the Study of Medical Diagnostic Model”, Advances in Fuzzy Mathematics (AFM), Vol. 12, No. 4, pp. 945-953, **2017**. ISSN: 0973-533X. [https://www.ripublication.com/afm17/afmv12n4\\_24.pdf](https://www.ripublication.com/afm17/afmv12n4_24.pdf)
28. **L. Sujatha**, P. Vinothini and R. Jothilakshmi, “Solving Fuzzy Transportation Problem using Zero Point Maximum Allocation Method”, International Journal of Current Advanced Research (IJCAR), Vol. 7, Issue 1, pp. 173-178, January **2018**. **UGC Journal number: 43892**. ISSN: O: 2319-6475, P: 2319-6505. <https://journalijcar.org/issues/solving-fuzzy-transportation-problem-using-zero-point-maximum-allocation-method>
29. **L. Sujatha**, S.A. Thara Jeni, T. Benith Sowmya and S. Jayasankari, “Solving Maximization problem in FTP and FAP using Fuzzy one point method”, Mathematical Sciences, International Research Journal, Vol. 7, Issue 2, pp. 486-492, **2018**. ISSN: 2278-8697. <https://www.imrfjournals.com/msirj72>
- (The paper also appeared as **Book chapter 29** of the book “Advances in Pure and Applied Mathematics”, pp. 243-251, ISBN 978-93-86435-54-5, Published by School of Mathematics, Madurai Kamaraj University & International Multidisciplinary Research Foundation).
30. **L. Sujatha** and K. Deepalakshmi, “Solving Transshipment Problem using Zero Point and ICMM Method”, International Journal of Research and Analytical Reviews (IJRAR),

Vol. 6, Issue 1, pp.56-60, Feb. **2019**. UGC Serial No. **43602**. Print ISSN: 2349-5138, EISSN 2348-1269. [https://www.researchgate.net/profile/L-Sujatha/publication/331311375\\_Solving\\_Transshipment\\_Problem\\_Using\\_Zero\\_Point\\_and\\_ICMM\\_Method/links/5c7a9dbba6fdcc4715a84e1b/Solving-Transshipment-Problem-Using-Zero-Point-and-ICMM-Method.pdf](https://www.researchgate.net/profile/L-Sujatha/publication/331311375_Solving_Transshipment_Problem_Using_Zero_Point_and_ICMM_Method/links/5c7a9dbba6fdcc4715a84e1b/Solving-Transshipment-Problem-Using-Zero-Point-and-ICMM-Method.pdf)

31. **L. Sujatha**, P. Deepika and K. Kalaivani, “Fuzzy TOPSIS method for solving MCDM problems using Metric Distance and Similarity Measure”, International Journal of Research and Analytical Reviews, Vol. 6, Issue 1, pp.550-553, February **2019**. UGC Serial No. **43602**. Print ISSN: 2349-5138, EISSN 2348-1269.  
[Published Paper URL: http://ijrar.org/viewfull.php?&id=IJRAR19J2802](http://ijrar.org/viewfull.php?&id=IJRAR19J2802)
32. **L. Sujatha**, M. Geetha Priya, N. Pavithra and R. Akila, “Fuzzy Transshipment Model using Fuzzy One Point Method”, Advances in Mathematics: Scientific Journal, Vol. 9, No. 8, pp. 6153-6167, **2020 (Scopus Indexed)**. ISSN: 1857-8365 (printed), 1857-8438 (electronic). Special Issue on ICMA-2020. <https://doi.org/10.37418/amsj.9.8.83>
33. Md. Shahira Sulthana, G. Margaret Joan Jebarani and **L. Sujatha**, A mathematical model for apportionment and reapportionment using F26A graph and the magic labelling, Malaya Journal of Matematik (MJM), an International Journal of Mathematical Sciences with Computer Applications, Vol. 9, No. 1, pp.396-398, **2021**.  
<https://doi.org/10.26637/MJM0901/0066>
34. **L. Sujatha** and N. Anbarasi, “Fuzzy Shortest Path Problem with Triangular Intuitionistic Fuzzy Numbers as Arc Lengths”, Advances and Applications in Mathematical Sciences, Vol.21, Issue 4, pp. 1687-1701, February **2022 (UGC approved)**.  
[https://www.mililink.com/upload/article/821927574aams\\_vol\\_214\\_february\\_2022\\_a6\\_p1687-1701\\_1\\_sujatha\\_and\\_n\\_anbarasi.pdf](https://www.mililink.com/upload/article/821927574aams_vol_214_february_2022_a6_p1687-1701_1_sujatha_and_n_anbarasi.pdf)
35. Md. Shahira Sulthana, G. Margaret Joan Jebarani and **L. Sujatha**, A coding technique with atomic numbers using the prime cordial labelling on F26A graph, Advances and Applications in Mathematical Sciences Volume 21, Issue 4, pp. 1745-1752, February **2022 (UGC approved)**.  
[https://www.mililink.com/issue\\_content.php?id=59&iId=395&vol=21&is=4&mon=February&yer=2022&pg=1615-2281](https://www.mililink.com/issue_content.php?id=59&iId=395&vol=21&is=4&mon=February&yer=2022&pg=1615-2281)

## **Paper Presentation:**

**No. of Papers Presented: 27**

Presented a paper on the topic

1. “Fuzzy shortest path problem based on fuzzy triangular number” at the **National Conference** on Recent Advancement in Pure and Applied Mathematics (RAPAM-2009), (*Sponsored by Tamil Nadu State Council for Higher Education*), organized by D.G Vaishnav College, Chennai-106 on Jan 23 &24, **2009**.
2. “Fuzzy Shortest path problem based on Statistical data and level (1-beta, 1-alpha) interval-valued fuzzy number”, at the **National Conference** on Fuzzy Mathematics, Graph Theory and Applications (NCFMGT'09), organized by Mepco Schlenk Engineering College, Sivakasi on April 17 &18, **2009. ISBN: 81-88338-08**.
3. “Fuzzy shortest path problem based on Intersection area” at the **International Conference** on Mathematical Methods and Computation (ICOMAC 2009), (*UGC sponsored*), organized by Jamal Mohamed College (Autonomous), Tiruchirappalli on July 24 & 25, **2009. ISBN:978-81-8424-466-3**.
4. “Fuzzy shortest path problem based on similarity degree using trapezoidal fuzzy number” at the **International Conference** on Mathematics and Computer Science (ICMCS 2010), organized by Loyola College, Chennai on Feb 5 & 6, **2010. ISBN:978-81-908234-2-5**.
5. “Fuzzy shortest path problem based on Euclidean Distance” at the **National Seminars** on New Vistas in fuzzy mathematics and its applications and Indian tradition in Mathematics, (*Sponsored by Dept. of Science and Technology, UGC, Kerala State Council for Science, Technology and Environment, Indian Council of Historical Research and Indian Council of Social Science Research*), organized by Kannur University, Kannur, Kerala from June 9-11, **2010**.
6. “Fuzzy shortest path problem based on Alpha-cut” at the **International Conference** on Mathematical Computing and Management (ICMCM 2010), (*Sponsored by AICTE, DST, CSIR, DIT, Kerala Mathematical Association, Computer Society of India, Trivandrum Chapter*), organized by the Dept. of Computer Applications MACFAST and Dept. of Management Science, Victoria University, Australia from Jun 17-19, **2010**.

7. "Fuzzy shortest path problem based on triangular fuzzy number matrices" at the **International Conference** on Mathematics and Computer Science (ICMCS 2011), organized by Loyola College, Chennai-34, on Jan 7 & 8, **2011. ISBN: 978-81-920490-0-7.**
8. "Fuzzy critical path problem for project scheduling" at the **National Conference** on Emerging Trends in Applications of Mathematics to Science and Technology (NCETAM 2011), organized by Auxilium College, Vellore-6, on Dec 8 & 9, **2011.**
9. "Fuzzy shortest path problem based on level  $\lambda$ -LR type representation of fuzzy interval" at the **International Conference** on Mathematics in Engineering and Business Management (ICMEB 2012), organized by Stella Maris College and Loyola Institute of Business Administration, Chennai on Mar 9 & 10, **2012. ISBN: 978-81-8286-015-5.**
10. "Fuzzy critical path in a network" at the **International Conference** on Mathematical Modeling and Applied Soft Computing (MMASC 2012), (*Sponsored by CSIR, IEEE Madras Section, Department of Science & Technology, Ministry of Science & Technology, Department of Information Technology, Ministry of Communications & Information Technology, Government of India, Indian National Science Academy*), organized by Coimbatore Institute of Technology, Coimbatore from July 11-13, **2012. ISBN:978-81-923752-1-2.**
11. "k-stage fuzzy transportation problem based on interval valued fuzzy numbers" at the **International Conference** on Mathematics and its Applications, (*UGC-Autonomous funded*), organized by Islamiah College, Vaniyambadi on Aug 29, **2012.**
12. "Medical Diagnosis based on Interval valued fuzzy number matrix and its new membership function" at the **State Level Seminar** on Recent Trends in Higher Mathematics, organized by Voorhees College, Vellore on Oct 12, **2012.**
13. "Fuzzy Project Network for Management Science" at the **International Conference** on Mathematical Computer Engineering (ICMCE-2013), organized by VIT Chennai on Nov 29 & 30, **2013. ISBN: 978-93-82338-90-1.**
14. "On searching shortest path in a classical network with fuzzy edge weights" at the **International Conference** on Mathematical Sciences (ICM-2014), organized by the School of Mathematics, Madurai Kamaraj University, Madurai from Aug 21-23, **2014. ISBN:978-93-84124-13-7.**

15. “Medical Diagnosis based on Interval valued fuzzy number matrices” at the 5 – Day **National Workshop** on Optimization and Fuzzy Mathematics (NWOFM-2014), organized by the Dept. of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University, Midnapore, West Bengal, India from Sep 9-13, **2014**.
16. “Fuzzy One Point Method for Finding the Fuzzy Optimal Solution for FTP and FUAP” at the **International Conference** on Mathematical Methods and Computations (ICOMAC 2015), organized by Jamal Mohamed College, Tiruchirappalli on Jan 22 & 23, **2015**.
17. “Decision Analysis in a network to identify the fuzzy shortest path” at the **National Conference** on Mathematical Applications in Engineering and Technology (NCMA 2015), organized by Sacred Heart College (Autonomous), Tirupattur, Vellore on Feb 11 & 12, **2015**.
18. “On searching critical path in a project network under fuzzy environment” at the **National Conference** on Recent Approaches of Mathematics to Science and Technology (NCRAM 2015), (*UGC sponsored*), organized by Auxilium College (Autonomous), Vellore on Feb 12 & 13, **2015. ISBN: 978-81-929362-1-5**.
19. “Fuzzy zero point Method for finding the fuzzy objective value for UFTP” at the **National Conference** on Pure and Applied Mathematics (NCPAM-2016), organized by the School of Advance Sciences (SAS), VIT University, Vellore on Mar 12, **2016**.
20. “Solving Fuzzy Transshipment Model using Fuzzy One Point and Fuzzy Zero Point Method” at the **International Conference** on Advances in Mathematical Sciences (ICAMS), (**Theme:** Emerging Trends of Mathematics in Science, Engineering and Technology), organized by the School of Advance Sciences (SAS), VIT University, Vellore in association with SIAM – VIT from December 1-3, **2017**.
21. “Solving fuzzy transportation problem using zero point maximum allocation method” & “Solving fuzzy critical path problem based on Mean-Width notation” at the **International Conference** on Intuitionistic Fuzzy Sets and their Applications, (*UGC-Autonomous funded*), organized by Islamiah College, Vaniyambadi on January 10 & 11, **2018**.
22. “Solving Maximization problem in FTP and FAP using Fuzzy one point method” at the **International Conference** on Advances in Pure and Applied Mathematics 2018

(ICAPAM 2018), organized by the School of Mathematics, Madurai Kamaraj University, Madurai from September 6 – 8, **2018**.

23. “Fuzzy TOPSIS method for solving MCDM problems using Metric Distance and Similarity Measure” at the **National Conference** on Applied Mathematics and its applications (Mathematical Modeling with Applications) (NCAMA 2019), organized by Sacred Heart College (Autonomous), Tirupattur, Vellore on February 6 & 7, **2019**.
24. “Solving Fuzzy Transshipment Model Using Fuzzy One Point Method” at the **National Conference** on Applied Mathematics and its applications (Mathematical Modeling with Applications) (NCAMA 2019), organized by Sacred Heart College (Autonomous), Tirupattur, Vellore on February 6 & 7, **2019**.
25. “A Mathematical Model for Apportionment and Reapportionment using F26a Graph and Magic Labeling” at the **International Conference** on Recent Trends and Technology of Mathematics and Science (QIVCRTTMS 2020), organized by Queens College of Arts and Science for Women, Pudukkottai, (Virtual mode) on October 7<sup>th</sup> & 8<sup>th</sup> **2020**.
26. “Statistical Hypothesis Testing under a Fuzzy Environment” at the “**International Conference** on Mathematical Sciences and Applications-ICMA 2024” organized by PG and Research Department of Mathematics, Sacred Heart College (Autonomous), Tirupattur in collaboration with Academia for Advanced Research in Mathematics (AARM) held on 15<sup>th</sup> and 16<sup>th</sup> Feb. 2024.
27. “Comparative Study on Transportation, Assignment, and Transshipment problems using one-point and zero-point methods” at the “**International Conference** on Mathematical Sciences and Applications-ICMA 2024” organized by PG and Research Department of Mathematics, Sacred Heart College (Autonomous), Tirupattur in collaboration with Academia for Advanced Research in Mathematics (AARM) held on 15<sup>th</sup> and 16<sup>th</sup> Feb. 2024.

### **Programmes Organized:**

1. **Organizing Secretary** for a **State-Level Workshop** on "Latex - A Document Preparation System" held on 22.01.2019.
2. **Organizing Secretary** for an “**International Seminar** on Applied Mathematics (ISAM 2019)” held on 10.07.2019.

3. **Co-ordinator** for a **National Level Faculty Development Programme** on "Artificial Intelligence and Computer Vision using MATLAB and SIMULINK" jointly organized with PG Dept. of Computer Science, Auxilium College (Autonomous), Vellore held on 26.09.2019.
4. **Organizing Secretary** for a One-Week **National Level Online Faculty Development Programme** on "R Language" organized in collaboration with Spoken Tutorial - IIT Bombay held during 13.05.2020 to 20.05.2020.
5. **Organizing Secretary** for an **Online Course** on "CSIR-UGC NET/SET Mathematical Sciences and Basics of MATLAB" held during 03.07.2020 to 10.07.2020.
6. **Organizing Secretary** for a **National Webinar** on "Applications of Mathematics" held on 22.12.2020. (National Mathematics Day – To Commemorate 133<sup>rd</sup> Birth Anniversary of the Indian Mathematician Srinivasa Ramanujan) – Virtual mode.
7. **Organizing Secretary** for a **National Level Online Workshop** on "LaTeX" held on 06.02.2021.
8. **Convener** for an **International Professional Development Programme** on "Major Role of Mathematics in the Development of Science and Technology" jointly organized with the Dept. of Mathematics, Little Flower Degree College, Uppal, Hyderabad, Telangana, held during 22.02.2021 to 26.02.2021 – Virtual mode.
9. **Co-ordinator** for a Two-Week **Online Faculty Development Programme** on "LibreOffice suite Writer, Calc & Impress" organized by the Board of Management, Auxilium College (Autonomous), Vellore in Association with Spoken Tutorial, IIT Bombay held during 26<sup>th</sup> May to 10<sup>th</sup> June, 2022.
10. **Co-ordinator** for a Five-Day **National Level Online PDP** on "Writing Research Articles in Mathematics & Statistics" organized in collaboration with Little Flower Degree College, Uppal, Hyderabad, Telangana held during 26.09.2022 - 30.09.2022.
11. **Co-ordinator** for the **International Webinar** on "Decoding Data Science" held on 25.11.2023.
12. **Co-ordinator** for the **State Level Workshop**: "Hands-on training on MATLAB (DST FIST Funded)" organized in association with Committee for Research Ethics, Publication & IPR, Auxilium College (Autonomous), Vellore held on 12.02.2024.

### **Team Member in Organizing the following Programmes:**

1. A **State Level Seminar** on Relevance and Challenges in Learning Abstract Mathematics (RACILAM 2003), organized by PG & Research Department of Mathematics, Auxilium College, Vellore on 07.02.2003.
2. **National Conference** on Emerging Trends in Applications of Mathematics to Science and Technology (NCETEM 2011), organized by PG & Research Department of Mathematics, Auxilium College (Autonomous), Vellore on 8<sup>th</sup> and 9<sup>th</sup> December 2011.
3. **National Conference** on Recent Approaches of Mathematics to Science and Technology (NCRAM 2015), organized by PG & Research Dept. of Mathematics, Auxilium College (Autonomous), Vellore on 12<sup>th</sup> and 13<sup>th</sup> February 2015.
4. Two-Day **State Level Workshop** on Intellectual Property Rights, organized by Tamilnadu State Council for Science and Technology (TNSCST), Government of India, Chennai, and Auxilium Research Cell & IPR Cell held on 2<sup>nd</sup> and 3<sup>rd</sup> August 2019.

### **Article Published in the College Magazine:**

- An article titled “Is Bothaiyanaar an Alternative to Pythagorean theorem?” under the content “Creativity of the Staff” was published in the College Magazine 2020-2021.

### **Refresher Course attended:**

- Attended a “Two-Week Refresher Course in Mathematics”, organized by The Department of Mathematics, Ramanujan College and Teaching Learning Centre, Ramanujan College, University of Delhi in collaboration with Ministry of Education, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching during March 16 – March 30, **2021**. Successfully completed the Refresher Course and obtained a **Grade A**.

### **Training Programme attended:**

- Attended the **6 days training program on Academic Leadership** under the scheme of Pandit Madan Mohan Malaviya National Mission on Teachers and Training, sanctioned by **MHRD, Govt. of India and organized by UGC HRDC**, Aligarh Muslim

University and Vaniambadi Muslim Educational Society for COE, Members of statutory Bodies, Finance officers and State Government officials at Islamiah College (Autonomous), Vaniyambadi from **March 21<sup>st</sup> – 27<sup>th</sup>, 2019**.

**E-Content Development:**

Developed 3 E-Contents on the topic

- “Difference between Crisp set and Fuzzy set”
- “Types of Uncertainty”
- “Discrete and Continuous Fuzzy Sets”

**Co-ordinator & organized the following Outreach Programmes through the Department:**

- Joy of Giving (Christmas season): Visited Wheel Trust (Rehoboth –Home for Children) on 19.12.2013.
- Joy of Giving (Christmas season): Visited Karunalaya - Orphanage for Young Children on 22.12.2018.
- Joy of Giving (Christmas season): Visited BETHEL - Mentally Retarded Vocational and Rehabilitation Home on 18.12.2019.
- To celebrate the Glorious 75<sup>th</sup> Indian Independence Day: Visited Trinity Hostel-Wheel Trust on 15.08.2022.
- In collaboration with YRC: Joy of Giving (Christmas season): Visited BETHEL - Mentally Retarded Vocational and Rehabilitation Home on 22.11.2022.
- In collaboration with YRC: Joy of Giving (Christmas season): Visited Trinity Hostel-Wheel Trust on 26.11.2022.

**Appointed as Examiner for Central valuation**

- Thiruvalluvar University, Vellore
- D.K.M College for Women, Vellore

**Appointed as External Examiner (by Thiruvalluvar University) to conduct the**

❖ **UG Practical Examinations (Statistics) at**

- Islamiah College, Vaniyambadi in **2008**
- S.S.S College of Arts, Science and Management in **2009**
- Indo-American College, Cheyyar in **2010**
- Adhiparasakthi College of Arts and Science, Kalavai in **2011**
- Mercury College of Arts and Science, Thandalam in **2012**
- Kaveripakkam College of Arts and Science, Kaveripakkam in **2012**
- Arunkrishna College of Arts and Science, Chengam in **2012**
- Holy Cross College of Arts and Science for Women, Tirupattur in **2016**
- King Nandhivarman College of Arts and Science, Thellar, Thiruvannamalai District in **2017**
- K.M.G. College of Arts & Science, R.S. Road, Ammananguppam, Gudiyattam in **2024**

❖ **UG Practical Examinations (Programming in C) at**

- Imayam College of Arts and Science, Vaniyambadi in **2018**

❖ Appointed as an External Examiner by Thiruvalluvar University to conduct Practical Examinations (FPMA24) for I B.Sc. Mathematics and Viva Voce examinations for Project (CPMA67) for III B.Sc. Mathematics students of Puratchi Thalaivar Dr. M.G.R. Government Arts and Science College, Madhanur, Vellore on **08.05.2023**.

❖ . **Appointed as Question Paper setter for setting question papers for the following Colleges:**

- D.K.M College for Women, Vellore
- Sacred Heart College, Tirupattur
- Adhiparasakthi College of Arts and Science, Kalavai
- Muthurangam Govt. Arts College (Autonomous), Vellore
- Theivanai Ammal College for Women, Villupuram
- Auxilium College (Autonomous), Vellore

**Granted Qualification approval (to hold the post) from the Thiruvalluvar University:**

No. TU/R/Appl.Qulfn./Lecturer/SHC/2007/64

Date: 31 Jan 2007

**Research Guidance (M.Phil.):** 2011 to 2020

No. TU/R/M.Phil. (Mathematics)/(FT-PT)/Guideship/ACV/2011/3125

Date: 04.03.2011

**Research Guidance (Ph.D.):** 2020 to till date

No. TVU/R/Ph.D/Guideship(FT-PT)/2019/7621

Date: 24.10.2019

**Computer Knowledge:** C and C++ languages

**Technical Qualification:** Completed Junior grade and Senior grade in Typewriting (English)

**M.Phil. Scholars presented and published research papers under the guidance of Dr. L. Sujatha:**

- Ms. K. Gayathri (2012-2013) - Presented a paper on the topic “Medical Diagnosis based on Interval-valued fuzzy number matrix and its new membership function” in the **State Level Seminar** on “Recent Trends in Higher Mathematics”, organized by the Department of Mathematics, **Voorhees College**, Vellore on Oct 12, **2012**.
- Ms. N. Anitha (2014-2015) - Presented a paper on the topic “A study on structures of Modified Fuzzy and Anti Fuzzy Graphs” at the UGC-sponsored **National Conference** on “Recent Approaches of Mathematics to Science and Technology (NCRAM 2015)”, organized by PG and Research Department of Mathematics, Auxilium College (Autonomous), Vellore on Feb 12 & 13, **2015**. **The paper was published in a Proceeding with ISBN: 978-81-929362-1-5**
- Ms. K. Bharathi (2014-2015) - Presented a paper on the topic “On searching critical path in a project network under fuzzy environment” in the UGC-sponsored **National Conference** on “Recent Approaches of Mathematics to Science and Technology (NCRAM 2015)”, organized by PG and Research Department of Mathematics, Auxilium College (Autonomous), Vellore on Feb 12 & 13, **2015**. **The paper was published in a Proceeding with ISBN: 978-81-929362-1-5**

- Ms. R. Chithra (2014-2015) - Presented a paper on the topic “Decision Analysis in a Network to Identify the fuzzy shortest path” at the **National Conference** on “Mathematical Applications in Engineering and Technology (NCMA 2015)”, organized by the Department of Mathematics, Sacred Heart College (Autonomous), Tirupattur, on Feb 11&12, **2015**.
- Ms. M. Abirami (2015-2016) - Presented a paper on the topic “Finding critical path in a project network under fuzzy environment”, in the *National Conference on “Ramanujan’s contributions and recent trends in Mathematics”*, Sponsored by DST-New Delhi, NBHM-Mumbai & MKU, organized by the School of Mathematics, Madurai Kamaraj University, **Madurai** on Dec 21-23, **2015**.
- Ms. P. Anjali (2015-2016) - Presented a paper on the topic “Fuzzy zero point Method for finding the fuzzy objective value for UFTP” at the **National Conference** on “Pure and Applied Mathematics (NCPAM-2016)”, organized by the School of Advance Sciences (SAS), VIT University, Vellore on Mar 12, **2016**. **The paper was published in the Global Journal of Pure and Applied Mathematics (GJPAM), Vol. 12, No. 3, Special Issue, pp.817-823, 2016. ISSN: 0973-1768.**
- Ms. J. Daphene Hyacinta (2016-2017):
  - Presented a paper on the topic “Application of triangular fuzzy membership matrix in the study of medical diagnostic Model” in the *International Conference on Mathematical Computer Engineering (ICMCE 2016)*, organized by the School of Advance Sciences VIT University, Chennai on Dec 16 – 17, **2016**. **The paper was published in the Advances in Fuzzy Mathematics (AFM), Vol. 12, No. 4, pp. 945-953, 2017. ISSN: 0973-533X**
  - Presented a paper on the topic “Complement and Isomorphism in Modified Fuzzy Graph” in the *International Conference on Mathematical Applications in Engineering and Technology (ICMA-2017)*, organized by the Department of Mathematics, Sacred Heart College (Autonomous), Tirupattur, Jan 27-28, **2017**.
- Ms. P. Vinothini (2017-2018):
  - Presented a paper on the topic “Comparative Study of Different Ranking Methods” in the *National Conference on Applied Mathematics (NCAM-2017)*,

organized by PG Dept. of Mathematics, Holy Cross Arts and Science College for Women, Tirupattur, Vellore Dt. on 27<sup>th</sup> September **2017**.

- Presented a paper on the topic “Solving fuzzy Transshipment Model using fuzzy one point and fuzzy zero-point method” in the *International Seminar on Advances in Statistics, organized by School of Advanced Sciences, Department of Mathematics, VIT, Vellore* on December 18-20, **2017**.
- Presented a paper on the topic “Solving fuzzy Transportation Problem using zero point Maximum Allocation Method” in the *UGC-Autonomous funded International Conference on Intuitionistic Fuzzy Sets and their Applications, organized by the Department of Mathematics, Islamiah College (Autonomous), Vaniyambadi* on January 10 &11, **2018**. **The paper was published in the International Journal of Current Advanced Research (IJCAR), Vol. 7, Issue 1, pp. 173-178, January 2018. UGC Journal number: 43892, ISSN: O: 2319-6475, P: 2319-6505**
- Ms. S. Kalaivani (2018-2019) - Presented a paper on the topic “Solving Multicriteria Decision Making Problems using Distance and Similarity Measures based on Fuzzy TOPSIS” at the “**International Conference on Mathematical Computer Engineering (ICMCE-2018)**”, organized by Mathematics Division, School of Advanced Sciences (SAS), **VIT, Chennai**, on November 23-24, **2018**.

**M.Sc. Students presented and published research papers under the guidance of Dr. L. Sujatha:**

- Ms. S. Jayasankari (2018-2019) – Presented a paper on the topic “Solving Maximization problem in FTP & FAP using fuzzy one point method” in the **International Conference on Advances in Pure and Applied Mathematics 2018 (ICAPAM 2018)**, organized by School of Mathematics, Madurai Kamaraj University, Madurai on September 6 – 8, **2018**. **The paper was published in Mathematical Sciences, International Research Journal, Vol. 7, Issue 2, pp. 486-492, 2018. ISSN: 2278-8697**
- Ms. Deepalakshmi (2018-2019) – Presented a paper on the topic “Solving Transshipment Problem using Zero Point and ICMM Method” in the Two days **National Conference on Innovations of Pure and Applied Mathematics**, organized by the Department of Mathematics, Sri Akilandeswari Women’s College, Wandiwash on **22.02.2019 and**

received the **Appreciation Award (First Prize)** for the best paper presentation. The paper was published in the **International Journal of Research and Analytical Reviews (IJRAR)**, Vol. 6, Issue 1, pp.56-60, 2019. Feb. 2019, UGC Serial No. 43602, Print ISSN: 2349-5138, EISSN 2348-1269

- Ms. Deepika (2018-2019) – “Fuzzy TOPSIS method for solving MCDM problems using Metric Distance and Similarity Measure” in the **National Conference** on Applied Mathematics and its applications (Mathematical Modeling with Applications) (NCAMA 2019), organized by the PG and Research Department of Mathematics, Sacred Heart College (Autonomous), Tirupattur, on February 6 & 7, 2019. **The paper was published in the International Journal of Research and Analytical Reviews, Vol. 6, Issue 1, pp.550-553, February 2019. UGC Serial No. 43602, Print ISSN: 2349-5138, EISSN 2348-1269**
- Ms. W. Kavitha Willams & Ms. M. Geetha Priya (2019-2020) - Presented a paper on the topic “Study of Solid Waste Management in Health Sector and its Environmental impacts in Vellore” in the 10<sup>th</sup> **International Congress** of Environmental Research (ICER-19), organized by Journal of Environmental Research and Development (JERAD) in collaboration with Adi Shankara Institute of Engineering and Technology, Kalady, Kerala, India on December 19-21, 2019. **The abstract of the Paper was published in the Congress proceedings.**
- Ms. M. Geetha Priya & Ms. N. Pavithra (2019-2020) - Presented a paper on the topic “Fuzzy Transshipment Model using Fuzzy One Point Method” at the **International Conference** on Mathematical Sciences and Applications (ICMA-2020), organized by the PG and Research Department of Mathematics, Sacred Heart College (Autonomous), Tirupattur, on 27-29 January 2020. **The abstract of the paper was published in the ICMA-2020 Proceedings. The paper was published in the Advances in Mathematics: Scientific Journal, Vol. 9, No. 8, pp. 6153-6167, 2020, ISSN: 1857-8365 (printed), 1857-8438 (electronic). Scopus indexed. Special Issue on ICMA-2020.**
- Ms. V. Sangeetha and Ms. E. Jency Leona (2019-2020) - Presented a paper on the topic “N-Stage Fuzzy Transportation Problem using Fuzzy One Point Method” at the **International Conference** on Mathematical Sciences and Applications (ICMA-2020), organized by the PG and Research Department of Mathematics, Sacred Heart College

(Autonomous), **Tirupattur**, on 27-29 January **2020**. **The abstract of the paper was published in the ICMA-2020 Proceedings.**

- Ms. S. Priyadharshini & Ms. S. Lakshmi (2019-2020) - Presented a paper on the topic “Solution for critical path problem using Triangular fuzzy numbers” in the **International Conference** on Integrated Knowledge Towards Enriched Society (IKTES 2020), organized by Loyola – Racine Research Institute of Mathematics and Computing Sciences (LIMCOS), Loyola College, Chennai on **January 22<sup>nd</sup> & 23<sup>rd</sup>, 2020**. **The Abstract of the paper was published in the Book of Abstracts of IKTES 2020.**
- Ms. S. Lakshmi & Ms. S. Priyadharshini (2019-2020) - Presented a paper on the topic “Fuzzy shortest path problem based on Mean and Standard Deviation Index” in the Two Day **International Conference** on MATHEMATICAL COMPUTER ENGINEERING ( ICMCE-2020 ), organized by the School of Advance Sciences VIT University, Chennai on 21–22, February 2020. **The Abstract of the paper was published in the Book of Abstracts of ICMCE-2020.**
- Ms. V. Narmadha & Ms. K. Rekha (2019-2020) - Presented a paper on the topic “Fuzzy shortest path network problem with Triangular Intuitionistic fuzzy numbers as Edge weights”, in the Two Day **International Conference** on MATHEMATICAL COMPUTER ENGINEERING (ICMCE-2020), organized by the School of Advance Sciences VIT University, Chennai on 21–22, February 2020. **The Abstract of the paper was published in the Book of Abstracts of ICMCE-2020.**
- Ms. N. Anbarasi (2020-2021) - Presented a paper on the topic “Fuzzy Shortest Path Problem with Triangular Intuitionistic Fuzzy Numbers as Arc Lengths” in the **International Conference** on Mathematics and Computer Application (ICMCA-2020), organized by Don Bosco College, Yelagiri Hills, Tirupattur Dist. from 10.09.2020-12.09.2020. **The paper was published in the Advances and Applications in Mathematical Sciences, Vol.21, Issue 4, pp. 1687-1701, February 2022. UGC approved.**
- Ms. P. Nandhini (2022-2023) - Presented a paper on the topic “Solving Transportation Problem using Zero-Point Method and VAM” in the “State-Level Intercollegiate Paper Presentation” organized by the Committee for Research Ethics, Publication & IPR,

Auxilium College (Autonomous), Vellore on **20.10.2022**. **She received the first prize and was rewarded with a certificate and a cash prize of Rs. 1000.**

- Ms. S. Kaveri (2023-2024) – Presented a paper on the topic “Statistical Hypothesis Testing under a Fuzzy Environment” at the “**International Conference** on Mathematical Sciences and Applications-ICMA 2024” organized by PG and Research Department of Mathematics, Sacred Heart College (Autonomous), Tirupattur in collaboration with Academia for Advanced Research in Mathematics (AARM) held on 15<sup>th</sup> and 16<sup>th</sup> Feb. 2024. **The Abstract of the Paper was published in the “Proceedings of ICMA-2024”.**
- Ms. B. Shalini (2023-2024) – Presented a paper on the topic “Comparative Study on Transportation, Assignment, and Transshipment problems using one-point and zero-point methods” at the “**International Conference** on Mathematical Sciences and Applications-ICMA 2024” organized by PG and Research Department of Mathematics, Sacred Heart College (Autonomous), Tirupattur in collaboration with Academia for Advanced Research in Mathematics (AARM) held on 15<sup>th</sup> and 16<sup>th</sup> Feb. 2024. **The Abstract of the Paper was published in the “Proceedings of ICMA-2024”.**

**Summer Internship Project:** Guided two M. Sc. Mathematics students of **Stella Maris College** (Autonomous), Chennai.

- Ms. S.A. Thara Jeni & Ms. T. Benith Sowmya (Stella Maris College) - Presented a paper on the topic “Solving fuzzy critical path problem using Mean-Width notation” in the *UGC-Autonomous funded* **International Conference** on Intuitionistic Fuzzy Sets and their Applications, organized by the Department of Mathematics, Islamiah College (Autonomous), Vaniyambadi on January 10 & 11, **2018**. **The Abstract of the Paper was published in the Book of Abstracts.**

**PG Project:** Guided 40 M.Sc. Mathematics students in their 4<sup>th</sup> Semester PG Project.