# CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS)
## STAFF PROFILE

## PERSONAL INFORMATION

**1. Name**            : **Dr. K. Kalaiarasi**

**2. Date of Birth**       : **25.02.1981**

**3. Address**           :

| Residential | Office |
|---|---|
| **Dr. K. Kalaiarasi**<br>**No.6, North Vellala Street,**<br>**Pandamangalam,**<br>**Woraiyur,**<br>**Trichy-620003**<br>**Tamilnadu** | **Dr. K. Kalaiarasi**<br>**Assistant Professor,**<br>**PG and Research Department of Mathematics**<br>**Cauvery College for Women,**<br>**Annamalai Nagar,**<br>**Trichy-620018**<br>**Tamilnadu** |

## ACADEMIC INFORMATION

**4. Designation & Department : Assistant Professor**

**PG and Research Department of Mathematics**

**5. Educational Qualification  :**

| Degree | Year | College/University |
|---|---|---|
| B.Sc  Mathematics | April 2001 | Holy Cross College,  Bharathidasan University |
| M.ScMathematics | April 2003 | Holy Cross College, Bharathidasan University |
| M.Phil Mathematics | March 2005 | St. Joseph College, Bharathidasan University |
| Ph.D Mathematics | August 2013 | Manonmanium Sundranar University ,Thirunelveli |
| *D.Sc (Doctor of Science - Mathematics) | Pursuing | Srinivasa University, Surathkal , Mangalore |

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**6.** Researcher ID:

Linked in :http://www.linkedin.com/pub/dr-kalaiarasi-k/26/9/a52

Google Scholar ID: MzISYJEAAAAJ

Orchid id: https://orchid.org/0000-0001-6705-5354

Scopus Author ID: 24512328500

Author ID: 57205761385

Mendeley:

https://www.mendeley.com/search/?page=1&query=Optimization%20of%20fuzzy%20inventory%20 EOQ%20model%20using%20kuhn-tucker%20method&sortBy=relevance

Web of Science : AAQ-7942-2020

Research Gate ID: https://www.researchgate.net/profile/Kkalaiarasi-Kalaichelvan

Website : https://drkkalaiarasi.org/

Publons: https://publons.com/researcher/1693974/kalai-arasi//

Vidwan : https://vidwan.inflibnet.ac.in/profile/205835

| Citations | 217 |
|---|---|
| h-index | 8 |
| i10-index | 7 |

**7. Experience** :

| Date of Joining | Institution | Year of Experience |
|---|---|---|
| 16.06.2016 | Cauvery college for women | 7 years 9 Months |
| Dec-2014 | Vel Tech University | 1 Year ,6 Months |
| Dec-2013 | Cambridge Institute of Technology | 1 year |
| Dec-2010 | CMRIT College | 3 years |
| Dec-2008 | SEA College | 1 year |
| Dec-2003 | Lowry Memorial College | 5 years |
| Dec-2003 | Urumu Dhanalakshmi College | 1 year, 6 Months |
| Jun-2003 | Holy Cross College | 6 Months |

**8. Areas of Specialization** **:** Fuzzy set theory and its applications

**9. Languages known :** Tamil, English

**10. Subjects Taught** **:**

| **UG** | Mathematical Statistics I ,Mathematical Statistics II, Astronomy, Abstract Algebra , Matlab Programming in C language Practical, |
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| PG | Algebra, Linear Algebra, topology, Mathematical Statistics, Advanced Numerical Analysis |
|---|---|
| **M.Phil** | Research Methodology , Fuzzy set theory |

## 11. Research Supervision:

| | University from where guideship obtained | Thesis | | |
|---|---|---|---|---|
| | | Completed (in numbers) | Year of Completion | Pursuing (in numbers) |
| **M.Phil** | Bharathidasan University | 12 | 2017-2022 | 2 |
| **P.hD** | Bharathidasan University | 3 | - | 4 |

## 12. Details of Publications:

| S.No | Journal Name & Volume | Year of Publication | ISSN Number | Name of the Paper | Impact Factor |
|---|---|---|---|---|---|
| 1. | Global journal of Pure and applied mathematics & 13 | June 2017 | 0973-1768 | An Introduction to fuzzy strong graphs, fuzzy soft graphs, complement of fuzzy strong and soft graphs | 0.19 |
| 2. | International journal of current research & 9 | July-2017 | 0975-833X | Arc sequence in complete and regular fuzzy graphs | 7.749 |
| 3. | Global journal of mathematical science: Theory and practical & 9 | Aug-2017 | 0974-3200 | Regular and irregular m-polar fuzzy graphs | - |
| 4. | Global journal of mathematical sciences: Theory and practical & 9 | Aug-2017 | 0974-3200 | Fuzzy coloring circular interval graphs of integer decomposition with constant variables | - |
| 5. | International journal of fuzzy mathematical archive & 14 | Dec-2017 | 2320-3247 | Coloring of regular and strong arcs fuzzy graphs | 1.37 |

| 6. | International journal of fuzzy mathematical archive & 14 | Dec-2017 | 2320-3242 | Fuzzy coloring of interval-valued fuzzy graph | 1.137 |
|---|---|---|---|---|---|
| 7. | International journal of pure and Applied Mathematics & 118 | Feb-2018 | 1314-3395 | Different types of edge sequence in pseudo regular fuzzy graphs | 7.19 |
| 8. | International Journal of Computer Sciences and Engineering & 6 | Aug 2018 | 2347-2693 | Coloring Of Polyhedral Regular and Irregular Fuzzy Graphs | 3.022 |
| 9. | International journal of pure and Applied Mathematics &120 | Sep 2018 | 1314-3395 | On Conormal product of two intuitionistic fuzzy graphs | 7.19 |
| 10. | International journal of pure and Applied Mathematics &120 | Sep- 2018 | 1314-3395 | Strong Domination in Pseudo regular and complete fuzzy graphs | 7.19 |
| 11. | International journal of pure and Applied Mathematics &120 | Sep 2018 | 1314-3395 | Strong Interval-valued Neutrosophic Intuitionistic Fuzzy Graph | 7.19 |
| 12. | International Journal of Mechanical Engineering and Technology & 9 | Nov 2018 | 0976-6340 | Optimization Of Fuzzy EOQ Model with unit time depended constant Demand and Shortages | 3.46 |
| 13. | International Journal of Research and Analytical Reviews & 6 | Jan 2019 | 2349-5138 | Origin Of KM-Algebra | 5.75 |
| 14. | International Journal of Research and Analytical Reviews & 6 | Feb 2019 | 2349-5138 | New Approach On Fuzzy graphs and Anti-Fuzy Graphs with Special arcs | 5.75 |
| 15. | International Journal of Research and Analytical Reviews & 6 | Feb -2019 | 2348-1269 | Storng and Weak Domination in Intuitionistic Fuzzy Graph | 5.75 |
| 16. | International Journal of Research and Analytical Reviews & 6 | Feb 2019 | 2349-5138 | Edge coloring of a Complement of Strong Interval valued Intuitionistic fuzzy graph | 5.75 |

| 17. | International Journal of Mechanical Engineering and Technology & 9 | Nov 2018 | 0976-6340 | Optimization Of Fuzzy Inventory model without shortage using Pentagonal Fuzzy Number | 3.46 |
|---|---|---|---|---|---|
| 18. | International Journal of Research in advent Technology | Jan 2019 | 2321-9637 | An Approach for Production planning using Fuzzy goal programming Technique | 3.505 |
| 19. | International Journal 0f Research in advent Technology | Jan 2019 | 2321-9637 | A Fuzzy Flow Shop Scheduling multi Objective Model | 3.505 |
| 20. | Journal of Advanced Research in Dynamical and Contorl Systems & - | June 2019 | 1943-023X | Optimization of Fuzzy Multi-Product, Multi-Period Model to select supplier for Deteriorating products while considering uncertainty as well as Back Order | 0.08 |
| 21. | Adalya journal & 8 | Aug-2019 | 1301-2746 | Square sum Min-max intuitionistic fuzzy labeling graphs | 5.3 |
| 22. | Adalya journal & 8 | Aug-2019 | 1301-2746 | Various product and dual strong domination in mixed and square mixed intuitionistic fuzzy graphs | 5.3 |
| 23. | Adalya journal & 8 | Aug-2019 | 1301-2746 | Interval, Double-valued neutrosophic intuitionistic fuzzy Graphs | 5.3 |
| 24. | Journal of Advanced Research in Dynamical and control systems & 11 | Aug-2019 | 1943-023X | Optimization of fuzzy Inventory EOQ Model using Kuhn-Tucker Method | 0.08 |

| 25. | Adalya journal & 08 | Aug-2019 | 1301-2746 | Fuzzy transportation problem optimization of fuzzy trisection trapezoidal transportation Problem | 5.3 |
|---|---|---|---|---|---|
| 26. | Infokara Research & 8 | Sep-2019 | 1021-9056 | Derivations of KM-algebra | 5.3 |
| 27. | Journal of Advanced Research in Dynamical and control systems & 11 | sep-2019 | 1943-023X | Optimization of fuzzy Economic production Quantity Inventory Model | 0.08 |
| 28. | Journal of the Gujarat Research society & 21 | Sep-2019 | 0374-8588 | Optimization of Rework cost function under fuzzy inventory model for synchronous and asynchronous | 4.3 |
| 29. | Compliance Engineering journal & 10 | Sep-2019 | 0898-3577 | Application of fuzzy measures in image processing of fauna and flora | 6.1 |
| 30. | Journal of information and computational science & 09 | Sep-2019 | 1548-7741 | Optimization of fuzzy inventory model for deterioration item with partial backlogging | 0.15 |
| 31. | International journal of analytical and experimental model analysis & XI | Sep-2019 | 0886-9367 | A study on phases of moon, chandrayan-II,sidereal month and synodic month | 6.3 |
| 32. | Infokara Research & 08 | 2019 | 1021-9056 | Mid-width method for solving for real interval integer tri angular fuzzy Transportation problem | 5.3 |
| 33. | The international journal of analytical and experimental modal analysis & XII | Jan-2020 | 0886-9367 | Minimal Spanning Tree Under Single Valued Neutrosophic Fuzzy Graphs | 6.3 |

| 34. | The international journal of analytical and experimental modal analysis & XII | Jan-2020 | 0886-9367 | Inventory model optimized to rectify the shortage by using Kuhn-Tucker Method | 6.3 |
|-----|-----|-----|-----|-----|-----|
| 35. | The international journal of analytical and experimental modal analysis &XII | Jan-2020 | 0886-9367 | Fuzzy inventory model of defective items in manufacturin g process | 6.3 |
| 36. | Journal of interdisciplinary cycle research & XII | Jan-2020 | 0886-9367 | Langrangian method of EOQ for Synchronous and assynchrhronous | - |
| 37. | Studies in Indian Place Names & 40 | Jan-2020 | 2394-3114 | A Study on Chandrayaan-Ii,Lunar Liberation,Lunar Day,Lunar Time | 6.3 |
| 38. | Our Heritage & 68 | Feb-2020 | 0474-9030 | Fuzzy measure-null additive, subadditive, superadditive, autocontinuous, uniformly autocontinuous. | 6.8 |
| 39. | Parishodh Journal & IX | March 2020 | 2347-6648 | Regular and Strong Anti-Labeling Fuzzy Graphs | 6.3 |
| 40. | Parishodh Journal & IX | March 2020 | 2347-6648 | The join product and dual strong domination in mixed split intuitionistic fuzzy Graph | 6.3 |
| 41. | The International journal of analytical and experimental modal analysis & XII | March 2020 | 0886-9367 | A New Notion On KM-algebra | 6.3 |
| 42. | Parishodh Journal &IX | March 2020 | 2347-6648 | The Shortest Path on Minimal Spanning Tree With Triangular Single- Valued Neutrosophic Intuitionistic Fuzzy Graph | 6.3 |

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| 43. | TEST Engineering & Management magazine | March - April 2020 | 0193-4120 | Fuzzy Inventroy eoq Model with the Impact of Stochastic Lead time Reduction | - |
| 44. | Journal of & 14 | April 2020 | 1001-2400 | Optimization of a Multiple-Vendor Single Buyer Integrated Inventory Model With A Variable Number of Vendors | 5.4 |
| 45. | Journal of Xidian University & 14 | April 2020 | 1001-2400 | Generalized Derivations of KM-algebras | 5.4 |
| 46. | Gedrag & Organisatie Review & 33 | June 2020 | 0921-5077 | Fuzzy Sets in KM-algebras | - |
| 47. | Journal of critical review | June 2020 | 2394-5125 | Optimizing EOQ using geometric programming with varying fuzzy numbers by applying python | 1.091 |
| 48. | Advances in Mathematics: Scientific Journal | June 2020 | 1615–1622 | Fuzzy Economic Order Quantity Inventory Model Using Lagrangian Method | 1.372 |
| 49. | Journal of Critical Reviews | June 2020 | 863-881 | Optimization Of Multi-Item (Eoq) Model for A Single- Buyer Using Fuzzy Geometric Programming | 1.091 |
| 50. | Journal of Model based Research | Aug 2020 | 1-12 | Determining the efficiency of fuzzy logic EOQ inventory model with varying demand in comparison with Lagrangian and Kuhn-Tucker method through sensitivity analysis | 1.091 |

| 51. | Kala Sarovar | Oct-Dec 2020 | 122-128 | Optimization of fuzzy inventory model with trapezoidal fuzzy numbers: Lagrangian method | 2.56 |
|-----|--------------|--------------|---------|----------------------------------------------------------------------------------------|------|
| 52. | Sambodhi | Oct-Dec 2020 | 85-98 | Rainbow domination in Graphs | 2.98 |
| 53. | Sambodhi | Oct-Dec 2020 | 99-122 | Characterization of outer-clique domination in graphs | 2.96 |
| 54. | Sambodhi | Oct-Dec 2020 | 89-93 | Expected profit of an eoq inventory model with inferior worth products | 2.96 |
| 55. | Journal of the Maharaja Sayajirao University of Baroda | Dec-2020 | 109-114 | A retailer total profit of an eoq inventory under trade credit | 5.544 |
| 56. | Materials Today: Proceedings | Dec 2020 | - | Fuzzy EOQ model with stochastic lead time using yager‟s technique | 1.3 |
| 57. | Materials Today: Proceedings | Jan 2021 | - | Solving a multi-product single machine EPQ inventory model with GP mode: By using python | 1.3 |
| 58. | Journal of Advances and Scholarly Researches in Allied Education | Jan 2021 | 1319-1326 | A Study on Math Rotter Model for Acknowledge of Intellectual with Technology | 3.16 |
| 59. | Materials Today: Proceedings | Jan 2021 | - | Optimization of unconstrained multi-item (EPQ) model using fuzzy geometric programming with varying fuzzification and defuzzification methods by | 1.3 |

| | | | | applying python | |
|---|---|---|---|---|---|
| 60. | Materials Today: Proceedings | Jan 2021 | - | Comparison of hexagonal fuzzy numbers with varied defuzzification methods in optimization of EOQ using GP technique | 1.3 |
| 61. | The Journal of Indian Art History Congress | Jan 2021 | 17-24 | Optimization of Optimal Ordering Strategy Pricing Model of Fuzzy Total Cost in Degraded Materials | - |
| 62. | The Journal of Indian Art History Congress | Jan 2021 | 68-74 | Optimization of EOQ Inventory Model with Inferior Worth Products in Expected Profit Per Cycle and Time | - |
| 63. | Wesleyan Journal of Research | February 2021 | 53-59 | A Retailer Total Profit Per Unit Time of An EOQ Inventory Under Both Non-Linear Stock and Holding Cost, Trade Financial | - |
| 64. | Materials Today: Proceedings | March 2021 | - | Shortest path on interval-valued nether trapezoidal Neutrosophic fuzzy Graphs | 1.3 |
| 65. | Communications in Computer and Information Science (CCIS) | March 2021 | 123-133 | Rethinking the Limits of Optimization Economic Order Quantity (EOQ) Using Self Generating Training Model by Adaptive-Neuro Fuzzy Inference System | 0.5 |

| 66. | Materials Today: Proceedings | March 2021 | - | Shortest path on interval-valued nether trapezoidal neutrosophic fuzzy Graphs | 1.3 |
|---|---|---|---|---|---|
| 67. | Annals of RSCB | April 2021 | 1583-6258 | Solutions of Inventory Model with Fuzzy Demand rate using Heptagonal Fuzzy Numbers | 0.9 |
| 68. | Journal of Mathematical Control Science and Applications | April 2021 | 107-120 | An application of domination in vague fuzzy incidence graphs | 6.235 |
| 69. | Turkish Journal of Computer and Mathematics Education | May 2021 | 3680-3693 | Shortest Path on Interval- Valued Triangular Neutrosophic Fuzzy Graphs with Application | 0.33 |
| 70. | Turkish Journal of Computer and Mathematics Education | June 2021 | 3680-3693 | Shortest Path on Intuitionistic Trapezoidal Neutrosophic Fuzzy Graphs with Application | 0.33 |
| 71. | Journal of Mathematical Control Science and Applications & 7 | June 2021 | 0974-0570 | An Application of Domination in Vague Fuzzy Incidence Graphs | 6.235 |
| 72. | Journal of Mathematical Control Science and Applications & 7 | June 2021 | 0974-0570 | Fuzzy Soft Tri-Partite Graphs and its Complement | 6.235 |
| 73. | Flusser Studies & 30 | August 2021 | 1661 - 5719 | Human Psychology and Related Mathematical Scientific Activities | |

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| 74. | Hindawi Complexity | October 2021 | 1076-2787 | Fuzzy Product KM-Subalgebras and Some Related Properties | - |
| 75. | Journal of Mathematical Control Science and Applications | October 2021 | 217-232 | Fuzzy mean square sum soft tri-partite graphs and its complement | 6.235 |
| 76. | Journal of Mathematical Control Science and Applications & 7 | December 2021 | 0974-0570 | Organizational Commitment on Organizational Citizenship Behaviors | 6.235 |
| 77. | Journal of Mathematical Control Science and Applications & 7 | December 2021 | 0974-0570 | Exploring COVID-19 Anxiety in Indian Based Education by Moderating Structural Equation Model | 6.235 |
| 78. | Journal of Mathematical Control Science and Applications & 7 | December 2021 | 189-198 | Domination in complete intuitionistic fuzzy incidence graphs with application | 6.235 |
| 79. | Journal of Mathematical Control Science and Applications & 7 | December 2021 | 189-198 | Fuzzy Mean Square Sum Soft Tri-Partite Graphs and its Complemen | 6.235 |
| 80. | Thermal Science | December 2021 | 2334 - 7163 | Optimization of the Average Monthly Cost of an EOQ Inventory Model for Deteriorating Items in Machine Learning Using Python | 1.66 |
| 81. | Advances and Applications in Mathematical Sciences | January 2022 | 1579-1588 | N- split domination in vertex squared interval-valued fuzzy graphs | - |

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| 82. | Advances and Applications in Mathematical Sciences | March 2022 | 0974-6803 | A Study on Domination in Product Picture Fuzzy Graph and its Application | |
| 83. | Advances and Applications in Mathematical Sciences | March 2022 | 0974-6803 | Vertex Perfect Anti-Magic Bipolar Fuzzy Labeling Graphs | |
| 84. | Advances and Applications in Mathematical Sciences | March 2022 | 0974-6803 | Application of Cactus Fuzzy Labeling Graph | |
| 85. | Discrete Dynamics in Nature and Society, Hindawi | May 2022 | 1026 - 0226 | Perfect Fuzzy Soft Tripartite Graphs and their Complements | |
| 86. | South East Asian Journal of Mathematics and Mathematical Sciences | April 2022 | 2582 - 0850 | n- Domination in Vertex Squared Double Divide Interval-Valued Fuzzy Graphs | |
| 87. | Discrete Dynamics in Nature and Society, Hindawi | July 2022 | 1026 - 0226 | The Characterization of Substructures of c-Anti Fuzzy Subgroups with Application in Genetics | |
| 88. | Computational Intelligence and Neuroscience | July 2022 | 1687 – 5237 | Economic Order Quantity Model-Based Optimized Fuzzy Nonlinear Dynamic Mathematical Schemes | |
| 89. | Thai Journal of Mathematics | June 2022 | 1686 – 0209 | The Characterization of Fuzzy and Anti Fuzzy Ideals in AG-groupoid | |

| 90. | Journal of Algebraic Statistics | June 2022 | 1309 - 1270 | Determining the efficient optimal order quantity for an Inventory model with varying Fuzzy components | |
|---|---|---|---|---|---|
| 91. | New Generation Computing | September 2022 | 1882 – 7055 | Design and Development of Modified Ensemble Learning with Weighted RBM Features for Enhanced Multi-disease Prediction Model | |
| 92. | Bulletin of the Calcutta Mathematical Society | February 2023 | 0008-0659 | Negative Valued Function in Fuzzy KM-algebras | |
| 93. | Indian Journal of Science and Technology | March 2023 | 0974 – 5645 | Negative Valued Ideals of Fuzzy KM-Subalgebras | |
| 94. | International Journal of Fuzzy Logic and Intelligent systems | March 2023 | 1598-2645(P),2093-744X(online) | Conormal Product for Intuitionistic Anti-Fuzzy Graphs | |
| 95. | Journal of Data Acquisition and Processing | Apr 2023 | 1004 - 9037 | Vertex Domination/Edge Domination in Semigraphs and Change in Coloring energy due to Edge Deletion | |
| 96. | Italian Journal Of Pure And Applied Mathematics | May-23 | 2239-0227 | The shortest path problem on chola period built temples with Dijkstra's algorithm in intuitionistic triangular neutrosophic fuzzy graph | |

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| 97. | Jnanabha | Jun-23 | 2455-7463 | Shortest Path On Interval-Valued Intuitionistic Trapezoidal Neutrosophic Fuzzy Graphs With Application | |
| 98. | International Conference on Advancement in Computation & Computer Technologies | Jun-23 | 979 – 8 – 3503 – 9648 | Diagnosing the Abnormalities in Brain Tumors with the Technique of K-Means Clustering with Knowledge Acquisition | |
| 99. | International Conference on Advancement in Computation & Computer Technologies | Jun-23 | 979 – 8 – 3503 – 9648 | Fuzzy Intelligence Inventory Decision Optimization Model of Sustainability and Green Technologies for Mixed Uncertainties of Carbon Emission | |
| 100. | Journal of Survey in Fisheries Sciences | Jun-23 | 2368 - 7487 | The Optimization Machine Learning Approach of Sensitive Analysis of Fuzzy Inventory Germination of Plants Generates One-Year-Old-Seeds And Two-Year-Old-Seeds With Fuzzy Inventory | |
| 101. | 2nd International Conference on Recent Trends in Applied and Computational Mathematics, AIP Conference Proceedings | Jun-23 | 9.78074E +12 | Sustainable Medical Supply Chain Network During Pandemic by Using Fuzzy Inventor | |
| 102. | Nonlinear Studies | May-23 | 2153 – 4373 | The Optimality representation of a finite-life inventory model with exiguous defective with Hessian matrix approach | |
| 103. | Tuijin Jishu/Journal Of Propulsion Technology | Nov-23 | 1001-4055 | An Integrated Approach of Ant Colony Optimization (ACO), Machine Learning (ML), and Fuzzy Logic for Revolutionizing Inventory Management | |

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| | | | | in Modern Supply Chains | |
| 104. | Tuijin Jishu/Journal Of Propulsion Technology | Nov-23 | 1001-4055 | Enhancing Food Resource Allocation in India: A Fuzzy Logic Approach Integrated with Julia and Python | |
| 105. | International Journal of Intelligent Systems And Applications In Engineering | Dec-23 | 2147-6799 | Image Caption Generation Using Recurrent Convolutional Neural Network | |
| 106. | Indian Journal of Science and Technology | Dec 2023 | 4585-4593 | Arithmetic Operations of Trigonal Fuzzy Numbers Using Alpha Cuts: A Flexible Approach to Handling Uncertainty | |
| 107. | First International Conference on Cyber Physical Systems, Power Electronics and Electric Vehicles (ICPEEV) , IEEE | Jan 2024 | | Fuzzy C-Means Clustering with MAIRCA -MCDM Method in Classifying Feasible Logistic Suppliers of Electrical Products | |
| 108. | Journal of Tianjin University Science and Technology | February 2024 | 0493-2137 | Optimization Of Fuzzy Intervalued Function In Medicinal Manufacturing And Stock Approaches: Refinement For A Pharma Companies | |
| 109. | Journal of Nonlinear Analysis and Optimization | February 2024 | 1906-9685 | Time-Optimal Control Strategies For Susceptible-Infected recovered (Sir) Epidemic Models In Cattle: A Deep Analysis Of Preventive Measures Sensitivity | |

## 13. Details of Papers Presented:

| Date | Organizer | Name of the Seminar | Paper Name |
|---|---|---|---|
| 20-02-2019 | Annai Womens college, Karur | International Conference on Advances in Mathematics | Fuzzy EOQ Trade credit vendor-buyer Inventory Models |
| 20-02-2019 | Annai Womens college, Karur | International Conference on Advances in Mathematics | A study on Fuzzy Algebra and Fuzzy topology |
| 20-02-2019 | Annai Womens college , Karur | International Conference On Advances in Mathematics | A study on fuzzy ideals and fuzzy filters of Fuzzy Latices |
| 11.01.2020 | Idhaya college for women | International Conference on Pure and Applied Mathematics | The Shortest Path on Minimal Spanning Tree with Triangular Single- Valued Neutrosophic Intuitionistic Fuzzy Graph |
| 04.03.2020 | Kongunadu College of Engineering & Technology | National Conference on Mathematics: Pure, applied and Computation (NMPAC-2020) | Minimal Spanning Tree Under Single Valued Neutrosophic Fuzzy Graphs |
| 11.08.2021 | Madurai Sivakasi Nadar Pioneer Meenakshi Women college, Madurai | New angled Avenues of Applied Mathematics | The shortest path problem on india famous Seven tourist place with Dijkstra"s Algorithm in Interval- Valued Intuitionistic Triangular Neutrosophic Fuzzy Graphs |
| 15.10.2022 – 19.10.2022 | Scientific Intelligence in New Normal Digital Era, FATHER Academy of India and The Association of Researchers of Thailand and University of Oradea, Thailand | Scientific Intelligence in New Normal Digital Era, FATHER Academy of India and The Association of Researchers of Thailand and University of Oradea, Thailand | Optimization of Economic Order Quantity Model on the Boundaries of the Fill Rate with Machine Learning using Python |

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| 21.12.2022 – 22.12.2022 | Applied Mathematical Sciences | JJ college of Arts and Science (Autonomous), Trichy | Paper Presentation Optimization of shortages in a fuzzy inventory management system through sign distance method in Python programming language |
| 27.01.2023 – 31.01.2023 | XLVI Social Science congress | Bharathidasan University, Tiruchirappalli | Optimization of shortages in a Fuzzy inventory management system through signed distance method in python programming language |
| 05.05.2023 – 06.05.2023 | Advancement in computation and computer technologies | Chandigarh University, Punjab | Diagnosing the abnormalities in brain tumors with the techniques k-means clustering with knowledge acquisition |
| 15.05.2023 – 17.05.2023 | Emergent converging Technologies and Biomedical systems | Jaypee University of Information Technology, Waknaghat, Solan, HP | Fuzzy Vendor-Buyer Trade Credit Inventory Model-Pentagonal numbers in Permissible Limits Delay in Account Settlement with Supervised learning |

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| 18.02.2024 - 19.02.2024 | Bon Secours Arts & Science College For Women, Mannargudi | International Virtual Conference on emerging trends For futuristic Development in Science and Technology (techtrendz 2k24) | Fuzzy Inventory Models With Machine Learning Via Linear Regression Models |
| 24.02.2024 | AIMAN COLLEGE, TRICHY | International Conference on Recent Trends in Mathematics and its Applications - 2024 | Optimization Of Fuzzy Inventory Economic Order Quantity Trade Credit Model With Machine Learning |

**14. Details of Seminars / Conferences / Workshops Attended:**

| Year & Date | Organizer | Title | National / International | Topic |
|---|---|---|---|---|
| 29.10.2018 to 02.11.2018 | Cauvery college for women and Department of Educational Technology, Bharathidasan University | Capacity Building workshop on e-content Development | National | e-content Development Fuzzy set |
| 24.08.2019 | Kongunadu College of Engineering and Technology, Namakkal | CSIR sponsored work shop "Innovations in Number Theory for Cryptography Applications" | National | Innovations in Number Theory for Cryptography Applications |
| 11.10.2019 | AIMAN College of Arts and Science, Trichy | FDP | National | Fuzzy Mathematics |

| Date | Institution | Title | Level | Event |
|---|---|---|---|---|
| 11.01.2020 | Idhaya college for women | The Shortest Path on Minimal Spanning Tree With Triangular Single- Valued Neutrosophic Intuitionistic Fuzzy Graph | International | Internatinal Conference on Pure and Applied Mathematics |
| 04.03.2020 | Kongunadu College of Engineering & Technology | Minimal Spanning Tree Under Single Valued Neutrosophic Fuzzy Graphs | National | National Conference on Mathematics: Pure, applied and Computation (NMPAC-2020) |
| 06.01.2023 – 07.01.2023 | Jamal Mohammed College, Trichy | Lecture Workshop on Differential Equations and their Applications in Mathematical Modeling | National | Lecture Workshop on Differential Equations and their Applications in Mathematical Modeling |
| 12.12.2022 – 24.12.2022 | Rajarshi Shahu Mahavidyalaya (Autonomous), Latur | Capacity Building Program on Advanced Research Methodology for Young Aspirants in Social Science and Humanities (ARM YASSH – 22) | National | Advanced Research Methodology for Young Aspirants in Social Science and Humanities (ARM YASSH – 22) |
| 27.02.2023 - 28.02.2023 | Gonzaga College of Arts and Science, Krishnagiri | Webinar on Smart material and its applications | National | Webinar on Smart material and its applications |
| 08.03.2023 | Theivanai Ammal College for Women, Villupuram | Webinar on plagiarism – Importance, consequence and to avoid | International | Webinar on plagiarism – Importance, consequence and to avoid |

| 16.03.2023 | Intellectual Property Office, India | IP Awareness/ Training Program | National | IP Awareness/ Training Program |
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| 22.04.2023 | Cauvery College for Women( Autonomous), Trichy | An Overview of Intellectual Property Rights | National | An Overview of Intellectual Property Rights |
| 26.04.2023 | Cauvery College for Women( Autonomous), Trichy | International IPR management | International | International IPR management |
| 26.04.2023 | Cauvery College for Women( Autonomous), Trichy | Spotlight on Intellectual Property Rights | National | Spotlight on Intellectual Property Rights |
| 26.04.2023 | Cauvery College for Women( Autonomous), Trichy | An Introduction to IPR | National | An Introduction to IPR |
| 03.04.2023 – 05.04.2023 | Mahoshri Institute of Technology (MIT Polytechnic), Yeola | Emerging trends in electrical technology | State | Emerging trends in electrical technology |
| 05.02.2024 - 14.02.2024 | NEP 2020 Orientation and Sensitization | Malaviya Mission Teacher Training Programme of UGC and Bharathidasan University | National | NEP 2020 Orientation and Sensitization |

**15. Details of Seminars / Conferences / Workshops Organized:**

| Date | Title | National / International | Topic |
|---|---|---|---|
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| 06.08.2016 | Conference | National | "Advances in applied mathematical sciences" NCAAMS -2k16 |
|---|---|---|---|
| 02.05.2020 | Seminar | National – FDP | Mathematical Model for Science and Engineering |
| 31.05.2020 | Seminar | National – FDP | Semi Graph and Virus Graph |
| 05.08.2020 | Seminar | National – FDP | On Time Scale : A survey Analysis |
| 2022 - 2024 | Conference | International | New Ideas in Technology and Innovation |

**16. Details of Orientation / Refresher Course Attended:**

| Date | Title of the Course | Organizer |
|---|---|---|
| 29.10.2018 to 2.11.2018 | Capacity Building Workshop on E- Content Development | Cauvery college for Women (Autonomous) |
| August to October 2019 | Higher Engineering Mathematics- FDP | NPTEL online course |
| August to October 2020 | Introduction to probability and Statistics | NPTEL online course |
| August to October 2020 | Graph Theory | NPTEL online course |
| August to October 2020 | Descriptive statistics with R Software | NPTEL online course |
| January to February 2021 | Python for Data Science | NPTEL online course |
| January to April 2021 | Essential of Data Science with R-Software 1 Probability and Statistical Inference | NPTEL online course |
| August to October 2021 | Computational Mathematics using Sage math | NPTEL online course |
| August to October 2021 | Mentor for Introduction to R software | NPTEL online course |
| August to October 2021 | Big Data Computing | NPTEL online course |
| July  - October 2022 | Approximate Reasoning Using Fuzzy Set Theory | NPTEL online course |

| July - October 2022 | Essential Mathematics for Machine learning | NPTEL online course |
|---|---|---|
| August to October 2022 | Introduction to Machine Learning | NPTEL online course |
| August to October 2022 | Machine Learning ML | NPTEL online course |
| August to October 2023 | Data Science for Engineers | NPTEL online course |
| August to November 2023 | Machine learning for soil and crop management | NPTEL online course |
| August to November 2023 | Applied Linear Algebra with AI and ML | NPTEL online course |
| Jan – Apr 2023 | Mentor for Data Science for Engineers | SWAYAM NPTEL Course |
| Jan – Apr 2023 | Mentor for Applied Linear Algebra in AI and ML | SWAYAM NPTEL Course |
| Jul – Dec 2023 | Machine Learning for Earth System Science | SWAYAM NPTEL Course |
| 07.12.2022 – 13.12.2022 | UGC-Sponsored Online Short Term Course in Employability and Soft Skills Development | UGC-HRDC Bharathidasan University, Khajamalai Campus, Tiruchirappalli |
| 10.1.2023 to 24.1.2023 | UGC-Sponsored Online Refresher Course in Human Rights and Social Inclusion (IC) | Dr. Babasaheb Ambedkar Marathwada University, Aurangabad |
| 07.02.2023 – 20.02.2023 | UGC-Sponsored Online Refresher Course in Reforms &amp; Innovations in Higher Education | Bharathidasan University Khajamalai Campus Tiruchirappalli |
| 10.03.2023 – 16.03.2023 | UGC-Sponsored Online short term course in Quality Assurance and Enhancement in Higher Education | Bharathidasan University Khajamalai Campus Tiruchirappalli |
| 24.04.2023 – 28.04.2023 | Short term Course – Recent Advancements in Medicinal Chemistry and Material Science | Vardhaman College of Engineering, Hyderabad |

**17. Details of Study Materials / Books written and published: Nil**

**18. Details of Chairing as Resource Person:**

| Date | Title of the Seminar/Conference | Institution | Session Sharred |
|---|---|---|---|
| 2017 | Application of mathematics | Cambridge institute of technology | 2 days |
| 2017 | Fuzzy inventory models | Aiman arts and science college for women | 10.00 – 11.30 AM |
| 2018 | Application of Mathematics | Annai Arts and science College | 10.00 -12.00 PM |
| 25.01.2019 | Application of mathematics in real life | Sri saradha college for women, Perambalur | 10.00 -12.00 PM |
| 05.03.2019 | Real life Applications of Algebra | Annai women"s College,Karur | 11.00 - 12.00 P.M |
| 04.06.2020 | Applications of Fuzzy Mathematics | Sri Ramakrishna College of Arts & Science For Women, Coimbatore | 10.00 – 11.00 AM |
| 28.06.2020 – 29.06.2020 | Fuzzy Graph and its Applications | Nizwa College of Technology, Oman | 3.00 – 4.00 PM |
| 12.07.2020 | Development of Fuzzy inventory Models | Mahendra College of Engineering, Salem | 10.30 – 12.00 PM |
| 22.07.2020 | Advances & Applications of Mathematics | Arts Commerce & Science College, Kille-Dharur | 11.00 – 12.00 PM |
| 12.09.2020 | Applications of Mathematics in Real life | Cheran Arts & Science College, Kangeyam | 10.00 – 11.00 AM |
| 07.10.2020 | Virtual Conference on Recent Trends and Technology of Mathematics and Science | Queens College of Arts and Science, Puddukottai | 3.00 – 4.00 PM |
| 16.10.2020 | Optimization of Fuzzy economic order quantity model for a Governable Carbon Emission for inventory models | Cheran Arts & Science College, Kangeyam | 10.30 – 12.00 PM |
| 02.11.2020 | Enhancing Awareness in Future Generation of Engineers | Nehru Institute of Technology, Coimbatore | 11.00 – 12.00 PM |
| 26.02.2021 | Real Life Application of Mathematics | Vasantdada patil Arts, Commerce & Science College, Patoda , Maharashtra | 10.00 – 11.00 AM |
| 12.3.2021 | Advances in Analysis and Algebra | Rajah serfoji Government College, Thanjavur | 3.00 – 4.00 PM |
| 05.08.2021 | Carrer Paths in Mathematics | Rabiammal Ahamed Maideen College for Women – Thiruvarur | 10.00 – 11.00 AM |

| Date | Title | Institution | Time |
|---|---|---|---|
| 06.10.2021 | A Promising Approach for Fuzzy Inventory Models based on Machine Learning | Dr. MGR Research and Educational Institute | 1.30 – 2.30 PM |
| 01.10.2021 | Optimization of Fuzzy Based Machine Learning Models | Kongunadu College of Engineering and Technology | 10.30 – 12.00 PM |
| 28.09.2021 – 30.09.2021 | Enhancement of Mathematical Research from students Perspective | Rathinam College of Arts and Science, Coimbatore | 3.00 – 4.00 PM |
| 01.10.2021 | Optimization of Fuzzy Based Machine Learning Models | Kongunadu College of Engineering and Technology | 10.00 – 12.00 PM |
| 06.10.2021 | A Promising Approach for Fuzzy Inventory Models based on Machine Learning | Dr. MGR Research and Educational Institute | 1.00 – 3.00 PM |
| 02.12.2021 | Applications of Mathematics in Real Life | Srinivasa University, Mangalore | 9.30 – 11.30 AM |
| 11.03.2022 | Fuzzy set Theory | St. Joseph University, Nagaland | 2.00 – 4.00 PM |
| 28.03.2022 – 01.04.2022 | Fuzzy inventory models with Machine Learning | KG College of arts and Science, Coimbatore | 10.00 – 12.00 PM |
| 27.04.2022 | Mathematics and its real life Applications : Modelling, Engineering and Social Sciences | Urumu Dhanalakshmi College, Trichy | 11.00 – 1.00 PM |
| 27.10.2022 | Entrepreneurial Thinking and Scientific Knowledge on Students | Aiman College of Arts and science for Women, Trichy | 1.00 – 2.30 PM |
| 04.11.2022 | Network Models in Operations Research | Patrician College of Arts and Science, Chennai | 10.00 – 12.00 PM |
| 28.12.2022 – 3.1.2023 | Research : Analysis Tools and Techniques | Theivanai Ammal College for Women(A), Villupuram | 2.00 – 4.00 PM |
| 31.01.2023 | International Conference on Research Trends in Contemporary Mathematics ICRTCM – 2023 | Patrician College of Arts and Science, Chennai & Sacred Heart College, Tirupattur | 10.00 – 12.00 PM |

| 12.03.2023 – 16.06.2023 | 5-Day National Workshop on "Applied Mathematics and Computing" | Madhav Institute of Technology and Science, Gwalior. | 4.00 – 6.00 PM |
|---|---|---|---|
| 24.01.2024 | Applications of Mathematics | Bon Secours Arts and Science College for Women | 2.00 – 4.00 PM |

**19. Administrative Positions held in the College:**

| Nature of Position | Year |
|---|---|
| NIRF Nodal Officer | 2021 – 2024 |
| ISO Auditor | 2020 – 2024 |
| EDC Coordinator | 2020 -2024 |
| IIC Ambassador | 2020 -2024 |
| Research Committee Secretary | 2020 -2022 |
| NAAC Criterion III Incharge | 2020 – 2024 |

**20. Details of In charge / Participation in Extracurricular Activities :**

**( NSS, NCC, Sports, Games, Voluntary Association and Cultural Activities):**

| Nature of Activity | Period of In charge |
|---|---|
| Staff Cultural In charge | 2017-18 |

**21. Details of Participation in Consultancy, Training, Development etc..:**

1. Consultancy- Microsoft - Certified Microsoft Innovative Educator

2. Consultancy- Microsoft - Getting started with one Note

**22. Details of Membership in Academic Bodies/ Board of Studies: Nil**

**23. Details of Membership of Professional Bodies:** 1. IJMSEA – Life time member

2. IJMRAE – Life time member

3. ISTE – Life time Member

4. Bharat Ganita Parisad – Life time Member

5. International Association of Engineers – time Member

**24. Countries visited academically**: Nil

**25. Any other information if any:**

1. Passed SET(State level Eligibility Test) in the year 2017

2. E-Content - Topic - Fuzzy set, Definition of Group, Definition of Permutation Group

3. Internship Viva-Voce External Examiner – Holy Cross College –Trichy – 21-02-2019

4. Translated Three NPTEL Courses
    1. Rings and fields
    2. Transforms calculus and its applications in Differential Equations
    3. Differential Equations for Engineers

5. Patent for "A Novel Brick Composition Comprising Low Density Polyethylene (LDPE) and Manufactured - Sand (M-Sand)"

6. Patent for "Blended Teaching and learning management platform for primary school children during epidemic period"

7. Patent for "Graphic Partitioning approach by Sequencing Small Graphs"

8. Patent for "Sand-Water Separation for irrigation"

9. Patent for "Solar and wind hybrid energy generation apparatus"

10. Patent For Fuzzy Logic Inventory Control System With Predictive Modelling For Covid Vaccine Pharmaceutical Distribution in Hospital Supply Chain Management-Machine Learning Model Approach

11. Awarded as **"NPTEL Motivator Learner"** by SWAYAM

12. Awarded as "NPTEL Discipline Star"

13. Awarded as "NPTEL BELIVER AWARD"

14. Awarded as "NPTEL EVANGELIST AWARD"

15. Awarded as "Top Performing Mentor"

16. Young Women Mathematician, Rathinam college of Arts and Science and INFINITY

17. Women Researcher Award, VDGOOD Technology Factory

18. Best Researcher Award, Cauvery College for Women (Autonomous), Trichy

19. Acted as an External Examiner for PhD Viva-voce Examination

20. Reviewed Papers in

   ➢ Advances in Science, Technology and Engineering Systems Journal
   ➢ Journal of Applied and Engineering Mathematics
   ➢ Advancing Research for Innovation, Sustainability and Enhancement
   ➢ Neutrosophic Sets and Systems
   ➢ Journal of Sustainability and Environmental Management
   ➢ Journal of Applied Math from November 2023 – 2024
   ➢ Certificate of Excellence in Reviewing "Asian Journal of Research in Computer Science"

   ➢ Reviewer in communication in nonlinear analysis

   ➢ Reviewer in 5th IEEE International Conference on Computing, Power and Communication Technologies (IC2PCT 2024) organized by Galgotias University, Greater Noida, Uttar Pradesh on 9th and 10th February 2024

- ➢ Peer reviewing of research papers for Global Multi-track Conference SEMA 2022
- ➢ Certificate of Excellence in Reviewing the manuscript "International Journal of Plant & Soil Science"
- ➢ Certificate of Excellence in Reviewing the manuscript "Asian Journal of Probability and Statistics"
- ➢ Certificate of Excellence in Peer - Reviewing the book "B P International"
- ➢ Editorial Board Member at our International Peer-Reviewed E-journal Multidisciplinary Cosmopolitan Journal of Research (MUCOJOR)
- ➢ Editor in Bulletin of the Marathwada Mathematical Society

21. Book Published Reading and Writing Dyslexia, Kindle Edition
22. Appointed as a QC Translator in SWAYAM
23. Appointed as a member of Board of Examiner for PhD, Bharathiyar University, Coimbatore
24. Appointed as a member of Board of Examiner for PhD, Prist University, Coimbatore
25. Number of National, International and State Webinars Attended     201
26. Number of Faculty Development Programme Attended     103
27. Number of Workshops and Training Programme Attended     74