

STAFF PROFILE

- 1) Name : Dr. A. Sahaya Sudha
2) Designation : Assistant Professor
3) Department : Mathematics
4) Qualification : M.Sc., M.Phil. B.Ed., PGDCA., Ph.D.
5) Experience : Teaching: 23 Research: 13
6) Area of Specialization (s) : Operations Research
7) E-mail : sudha.dass@yahoo.com
8) Academic Qualifications:

S. No	COURSE	YEAR OF COMPLETION	UNIVERSITY / INSTITUTION
1	B.Sc.	1992	Madurai Kamaraj University
2	M.Sc.	1994	Manonmaniam Sundarnar University
3	B.Ed.	1995	Manonmaniam Sundarnar University
4	M.Phil.	2001	Madurai Kamaraj University
5	Ph.D.	2015	Bharathiar University

- 9) Additional Qualifications:

Diploma/ Vocational/ Certification	Area of Specialization	Institution/ University/ Agency Name	Year
PGDCA	Computer Applications	Bharathiar University	2002

- 10) Grants Received

Event Title	Agency	Amount	Date
International conference ICCBM-2012 held at SINGAPORE.	UGC	71,355	21.08.2012

11) Projects -Completed

Project Title	Agency	Amount	Duration
Mathematical Application for Water Management studies for Agricultural Crop Cultivation	UGC	5,00,000	2years (2017-2019)

12) Research Guidance

Programme	No. of Scholars	
	Completed	Pursuing
Ph. D.	2	4
M. Phil.	16	-

13) Research Publications

International Publication in Journals: (June 2015 -16 Onwards)

Sl No	Year of publication	Name of the author/s	Title of the paper	Name of journal	Vol, Issue, Pg. No	ISSN/ ISBN number	INDEX
1	2015	Sahayasudha A &Anitha.N	Solving an interval fuzzy linear programming problem using Alpha-cut operation	International Journal of Computer Applications	112(10), pg:14-16	0975 - 8887	Cross reference
2	2015	Sahayasudha A & kanni ammal	Solving Multi objective Fully Fuzzy Linear Programming Problem Using Ranking Function	International Journal of advanced and Innovative Research	4(2) pg:86-89	2278-7844	Google scholar
3	2015	Sahayasudha A& Rachel Inba Jeba.J	Crop selection based on fuzzy TOPSIS using Entropy weights	International Journal of Computer Applications	124(14), pg:16-20	0975 - 8887	Cross reference
4	2015	Sahayasudha A& Rachel Inba Jeba.J	An Agricultural Economic Problem using Intuitionistic Fuzzy	International Journal of multidisciplinary and Current Research	Vol3, pg:900-903	2321-3124	Google scholar
5	2015	Karthika. R &Sahayasudha A	Estimation of Drug Administered by Fuzzy CETD Matrix to a Patient for a Bacterial Disease	International Journal of Computer Applications	130(2) pg:30-33	0975 - 8887	Google Scholar

6	2016	Sahayasudha A & Rachel Inba Jeba.J	An Intuitionistic Fuzzy Approach for Solving Generalized Trapezoidal Travelling Salesman Problem	International Journal of Mathematics Trends and Technology	29(1)	2231-5373	UGC
7	2016	Sahayasudha A & Revathi	Solving FLPP with Symmetric Trapezoidal fuzzy numbers	International Journal of Informative & Futuristic Research	3 (10), pg:3753-3762	2347-1697	Copernicus
8	2016	Sahayasudha A & Vijayalakshmi K. R	Fuzzy Transportation Problem Using Symmetric Hexagonal Fuzzy Numbers	IOSR Journal of Mathematics	pg:76-81	: 2278-5728	Cross reference
9	2016	Sahayasudha A & Revathi .M	A New Ranking on Hexagonal Fuzzy Numbers	International Journal of Fuzzy Logic Systems	6(4), pg:1-7	1839-6283	Google Scholar
10	2016	Pushpalatha.E & Sahayasudha. A	Identification of Age Groups Vulnerable to Asthma Disease using CETD Matrix	International Journal of Advanced Research in Computer Science and Software Engineering	6(10) /pg:13-17	2277-6451	Copernicus
11	2016	Sahayasudha A & Vijayalakshmi K.R.,”	A Modern Approach in Ranking Of Symmetric Hexagonal Fuzzy Number	Aryabhata journal of Mathematics and Informatics	8(2), /pg:42-49	2394-9309	RESEARCH GATE
12	2016	Sahayasudha A & Revathi .M	Optimal Solution of Hexagonal Fuzzy Transportation Problem Using New Ranking Method	Aryabhata journal of Mathematics and Informatics	8(2)/pg:50-55	2394-9309	RESEARCH GATE
13	2017	SahayaSudha A & Vijayalakshmi	An Alpha -Cut Operation in a Transportation Problem Using Symmetric Hexagonal Fuzzy Numbers	International Journal of Fuzzy Logic Systems (IJFLS)	Vol.7, No.1 pg:31-48	1839 - 6283	web of science
14	2017	SahayaSudha A & Karunambigai	Solving a Transportation Problem using a Heptagonal Fuzzy Number	International Journal of Advanced Research in Science, Engineering and Technology	Vol. 4 pg:3118-3125	2350-0328	Google Scholar

15	2017	SahayaSudha A &Gokilamani.R	An Arithmetic Operation On Hexadecagonal Fuzzy Number	international Journal of Fuzzy Logic Systems (IJFLS)	Vol.7, No.1 pg:19-29	1839 - 6283	web of science
16	2017	SahayaSudha A ,Sathya.S &Vimalavirginmary	Solving a Multi Objective Linear Programming Problem Using Pentagonal Fuzzy Numbers	International Journal of Mathematics Trends and Technology (IJMTT)	Volume 41 Number 3 pg:279-282	2231-5373	UGC
17	2017	SahayaSudha A & Chinthiya	A Transportation Problem Analysed by a New Ranking Method	International Journal of Innovative Research in Science & Engineering	Volume 5(1) pg:9-16	2347-3207	Google Scholar
18	2017	SahayaSudha A & . Vijayalakshmi	A Value and Ambiguity-Based Ranking of Symmetric hexagonal Intuitionistic Fuzzy Numbers in Decision Making	Advances in Fuzzy Mathematics.	. Volume 12, Number 4 pg:867-879	0974-0201	Google Scholar
19	2017	SahayaSudha A, Vimalavirginmary, & Sathya.S,”	A Novel Approach for Solving Fuzzy Linear programming problem using Pentagonal Fuzzy numbers	International Journal of Advanced Research in Education & Technology	Vol. 4, Issue 1 pg:42-45	2394-2975	Cosmos
20	2017	Sahayasudha A & Revathi	Arithmetic Operations on Intuitionistic Hexagonal Fuzzy Numbers Using α Cut	International Journal on Recent and Innovation Trends in Computing and Communication	Volume: 5 Issue: 6 pg:696-704	2321-8169	ResearchGate
21	2017	SahayaSudha A &Anita. S	Applying Topsis Method for Evaluating the Water Requirement of Agricultural Crops	International Journal on Future Revolution in Computer Science & Communication Engineering	Volume: 3 Issue: 8 pg:197 – 202	2454-4248	Google Scholar
22	2018	Sahaya Sudha. A & Vijayalakshmi K. R	Arithmetic Operations of Hexagonal Intuitionistic Fuzzy Number Using Extension Principle	International Journal of Mathematics And its applications	6(2-A)/pg:219-225	2347-1557	Scribd

23	2017	Sahayasudha A & Revathi	Analyzing MOIFLPP Using Heptagonal Intuitionistic Fuzzy Number	International Journal Of Creative Research Thoughts (IJCRT)	Volume 5, Issue 3	2320-2882	Google Scholar
24	2018	Karthika. R & Sahayasudha A	A Decision-Making Problem on FAHP with Z-Numbers	International journal of Mathematics Trends and Technology (IJMTT)	Volume 57 Issue 4	2231 – 5373	Cross Ref
25	2018	Sahayasudha A & Revathi	Multi-Objective Stochastic Intuitionistic Fuzzy Linear Programming Problem	International Journal of Mathematics and Computer Applications Research (IJMCAR)	Vol. 8, Issue 3	2249-6955	SCOPUS Indexed, UGC CARE Listed & WOS
26	2018	Sahayasudha A & Ruby.V	Assessment of Air Quality in Coimbatore City using TOPSIS Method	International Journal of Advanced Research in Science, Engineering and Technology	Vol. 5, Issue 8	2350-0328	Google Scholar
27	2018	Sahayasudha A & Ruby.V	Analysis Of Major Air Pollutant Of an Industrial area in Coimbatore City Using Fuzzy Topsis	International Journal of Research in Humanities, Arts and Literature	Vol. 6, Issue 9 pg:279-285	2347-4564	Google Scholar
28	2018	Revathi & Sahayasudha	A Linear Programming Problem Using Fuzzy Z Numbers to Find Optimality Under Uncertainty In Vegetable Cropping	International Journal of Pure and Applied Mathematics	Volume 119 pg:3293-3300	1314-3395	Google Scholar
29	2018	Revathi & Sahayasudha	A Solving linear programming problem by means of fuzzy Z numbers	International Conference on Applied and Computational Mathematics IOP Conf. Series: Journal of Physics	Conf. Series 1139		Scopus Indexed
30	2018	Sahayasudha A & Vijayalakshmi K. R	A Multi-Attribute Decision Making Problem in A Single Valued Neutrosophic Method	International Review of Fuzzy Mathematics	Volume 13, No. 2	0973-4392	UGC

31	2019	Karthika. R & Sahayasudha A	Fuzzy Decision Making applying Z numbers with AHP & BWM	International Journal of Research in Advent Technology (IJRAT)	pg:106-109	2321-9637	Web of Science
32	2019	Revathy.M & Sahayasudha A	An interval valued linear programming problem with trapezoidal z fuzzy number	Indian journal of research	Volume-8 Issue-1 pg:43-45	2250-1991	Google Scholar
33	2019	S. Roseline Priya & A. Sahaya Sudha	Solving a Fuzzy Transportation Problem by Stepping Stone Method	International Journal for Research in Applied Science & Engineering Technology	Volume 7	2321-9653	Google Scholar
34	2019	Sahayasudha A & Vijayalakshmi K. R	Multi Attribute Decision-Making Method Using Value and Ambiguity in Single Valued Hexagonal	International Journal of Scientific Research in Mathematical and Statistical Sciences	Vol.6, Issue.3 pg:84-90	2348-4519	Cross Ref
35	2019	R. Karthika & A. Sahaya Sudha	A New Operation on Sinusoidal Fuzzy Number	International Journal of Scientific Research in Mathematical and Statistical Sciences	Vol.6, Issue.4, pg:104-107	2348-4519	Cross Ref
36	2019	Sagayakavitha.D & Sahaya Sudha. A	A comparative study on production planning using FFLPP and FFGLP	International Journal of Research and analytical Reviews	Volume-6(2), Pg.: 339-345	2348 – 1269	Google Scholar
37	2019	Sahaya Sudha. A	Application of EDAS Method on Water Requirement in Agriculture	International Journal of Engineering Research & Technology	Vol. 8 Issue 12 pg:558-561	2278-0181	SCOPUS & Web of Science (WoS)
38	2020	Lincy Marshaleena.L & Sahaya Sudha. A	A tetra sectional approach in an interval valued linear programming problem	Infokara Research	Volume 9 Issue 1pg:306-313	1021-9056	UGC
39	2020	Sahaya Sudha. A & Agnes Jenifa. A	Solving a soft set in linear programming	Journal of Information and Computational Science	Volume 10 Issue 2 pg:1303-1310	1548-7741	UGC

40	2020	Sahaya Sudha. A & Bridjet .X	A new approach for solving symmetric pentagonal intuitionistic fuzzy transportation problem by ranking	Journal of Information and Computational Science	Volume 10 Issue 2 pg:1341-1357	1548-7741	UGC
41	2020	Sagayakavitha.D & Sahaya Sudha. A	New Approach to Solve Symmetric Triangular Neutrosophic Linear Programming Problem By Score Function	Journal of Information and Computational Science	Volume 10 Issue 3 pg:908-915.	1548-7741	UGC
42	2020	Sahayasudha A & Vijayalakshmi K.R	Grey-Correlation for Generalized Hexagonal Intuitionistic Fuzzy Numbers	The International journal of analytical and experimental modal analysis	Volume XII, Issue III pg:2058-2065	0886-9367	UGC
43	2020	Sahayasudha A	Identifying The Economic Viability of A Crop Using Stochastic Edas	Paripex - Indian Journal Of Research	Volume-9 Issue-4	2250 - 1991	UGC
44	2020	Sahayasudha A & Vijayalakshmi K.R	Interval Valued Neutrosophic Numbers Using Entropy	Infokara Research	Volume 9, Issue 4	1021-9056	UGC
45	2020	Sahayasudha A & Vijayalakshmi K. R	Assessment of MCDM problems by TODIM using aggregated weights	Neutrosophic Sets and Systems	Vol. 35 pg:78-98	2331-608X	SCOPUS
46	2020	Sahayasudha A	An Application of Neutrosophic Linear Programming Problem in an Agricultural Environment	Strad Research	VOLUME 7, ISSUE 8 pg:303-312	0039-2049	WEB OF SEIENCE
47	2020	Revathy.M & Sahayasudha A	Solving LPP with stochastic neutrosophic Pythagorean Z numbers	AIP Conference Proceedings 2261	2261, 030088	03008-1-03008-14	SCOPUS
48	2020	. A. Sahaya Sudha, G. Supriya	A New Approach for Solving Type-4 Fuzzy Transportation Problem	The International journal of analytical and experimental modal analysis	Volume XIII, Issue II, 1487-1494	0886-9367	UGC
49	2020	A. Sahaya Sudha1, S. Iswariya	A NEW RANKING APPROACH FOR	Journal of Interdisciplinary Cycle Research	Volume XIII, Issue II, 2630-2637	0022-1945	UGC

			AN ASSIGNMENT PROBLEM				
50	2021	Gokilamani.R Sahaya Sudha. A	Double Refined Indeterminate Trapezoidal Neutrosophic Numbers in LPP	Strad Research	VOLUME 8, ISSUE 6 pg:361-370	ISSN: 0039- 2049	WEB OF SCIENCE
51	2021	Karthika. R &Sahayasudha A	RANKING OF SINUSOIDAL FUZZY NUMBER AND ITS APPLICATION IN SIGNALS	Strad Research	VOLUME 8, ISSUE 6 pg:533-538	ISSN: 0039- 2049	WEB OF SCIENCE
52	2021	Karthika. R &Sahayasudha	A Sinusoidal Fuzzy Soft Set and its Application in Mcdm BITMET 2020	IOP Conf. Series: Journal of Physics: Conf. Series	Pg1-11	1947 (2021) 012050	SCOPUS

14) Other Publications:

International

- 1.. Sahaya Sudha. A &Raja Rajeswari. P, ” Multiobjective Fuzzy optimization Techniques in production Planning process, Proceedings of the Heber International Conference on applications of mathematics and statistics HICAMS (2012), 5-7, January at Bishop Heber College, Tiruchirappalli.
- 2.Sahaya Sudha. A &Raja Rajeswari. P, ” AHP Combined with Fuzzy Topsis for Evaluating a Best Alternative, International Journal of Computer Applications (ICICIC) proceedings on 2013/number 2250-1717/11294-13537
3. A Mathematical Algorithm on Water Requirements for Agricultural Crops at the International Conference on Emerging Trends in Science and Social Science, Malaysia. On 03&04.05.2019

National

1. Sahaya Sudha. A &Raja Rajeswari. P, ” Perception of Consumers on Brand and Decision Making, National Conference Proceedings on Brand India –Achievements and challenges, Nirmala College for Women, Coimbatore on 04.10.2012.
2. Sahaya Sudha. A &Raja Rajeswari. P, ” Fuzzy ANP Approach on Centroid Ranking and its Application on Brand Perception”, National Conference proceedings, Baseliios PoulouseII Cathelicos College, Pirvaom, Kerala. (2012)
- 3.Sahaya Sudha. A & Karthika. R, Medical Diagnosis of Bacterial fever with Viral fever using AHP, National Conference Proceedings, NARC (2013).
4. Sahaya Sudha. A & Thenmozhi Conservation of Energy on Using Bulbs through Analytic Hierarchy Process, National Conference Proceedings, NARC (2014).

5. Sahaya Sudha. A Collision Prevention Using Fuzzy Logic Controller, National Conference Proceedings, NARC (2014)

15) Participation in Conference

1. National Conference on Brand India, Nirmala College for Women, Coimbatore on 4.10.12
2. Heber International conference on Applications of Mathematics and Statistics (λ icams- 2012) Bishop Heber College, Tiruchirappalli from 5.01.12 -7.01.12
3. International Conference on Computer and Business management (ICCBM2012), IACSIT, Nichuan University, Guizhou University, Quality Hotel Marlow, Singapore from 9.06.12-10.06.12
4. International Conference on Innovations in Communication, sponsored by Information and Computing Ministry of earth sciences, Govt of India, IEEE, ICTACT, Sasurie College of Engineering, Vijayamangalam from 9.01.13 -11.01.13
5. National conference on Fuzzy logic and its Applications to Computer Science & the Annual Conference of Kerala Mathematical Association sponsored by UGC at, Baselious Poulouse II Catholicos college, Piravom from 20.02.14 to 22.02.14
6. Participated in the International Conference on Emerging Trends in Science and Social Science Malaysia. from 03.05.2019 & 04.05.2019

16) Participation in Seminar

1. Regional Seminar on Optimization Techniques in Engineering Fields, Sri Shakti Institute of Engineering and Technology, Coimbatore on 7.12.07
2. National Seminar on Advances in applied Mathematics, Dept. of Applied Mathematics, and Bharathiar University on 23.3.09
3. National Seminar on challenges Before Humanity, St. Mary's college Thoothukudi. on 1.10.09 and 2.10.09
4. State level seminar on Modern Trends in Mathematical Sciences, Dr. NGP Arts and Science College, Coimbatore on 05.03.10
5. National Seminar on Mathematical Computation, NSMC-2011 Education, sponsored by Tamilnadu State Council for Higher Education, Government Arts College, Coimbatore on 28.03.11
6. National Seminar on Challenges and Strategies in Human Rights Education sponsored by UGC Nirmala College for Women, Coimbatore on 25.08.11-26.08.11.

7. State Level Seminar on Advanced Trends in Mathematical Sciences at Dr.NGP Arts and Science College, Coimbatore on 17.02.12.

8. National Seminar on Financial Literacy- The present Trend and Future Challenges. Sponsored by UGC at Nirmala College for Women, Coimbatore on 22.02.13 -23.02.13

9. National Seminar on Environmental awareness and modern literature, UGC, Nirmala College for women, Coimbatore on 16.07.15 to -17.07.15

17) Participation in Workshop

1. National Workshop on Mathematical Modeling, - Dr.SNS Raja Lakshmi college of Arts & Science, on 14.03.08

2. Workshop on Matlab-A Tool for Research-D.J. Academy for Managerial Excellence, Othakkalmandapam, Coimbatore.on 25.07.09

3 Workshop on Quality Management in Setting Question Papers and evaluation of answer scripts IQAC-PSGR Krishnammal College for Women, Coimbatore on 27.08.10.

4.Research Promotion Workshop on Introduction to Graph and Geometric Algorithms sponsored by National board of higher Mathematics and Council of Scientific and Industrial Research at, PSG College of Technology, Coimbatore from 06.01.11 to 08.01.11.

5. International workshop on” A search for Research “organized by Kalaivani College of Technology, Coimbatore on 12.01.12.

6. Workshop on Research challenges S G College of Technology, Coimbatore. On 9.02.13

7. Workshop on Outcome Based Education conducted by IQAC, Nirmala College for women on 24.03.18.

18) Participation in Orientation Programme/ Induction Programme/ Short term Courses

1. Attended 28 days Orientation Programme. at Academic Staff College, Bharathiar University, Coimbatore from 15.05.09 to 11.06.2009

2. Attended 21 days. Refresher course at Academic Staff College, Madras University, Chennai From 11.11.2011 to 1.12.2012

3. Attended 7 days Orientation Training programme at Avinashilingam Institute for Home Science and Higher Education for Women University, Coimbatore from 13.12.2013 to 19.12.2013 for NSS programme Officers.

4.Attended 10 days South Zone Pre RD-Camp as a contingent leader from 01.10.2014 to 10.10.2014 at Vidhya Academy of Science and Technology Trissur, Kerala.

5. Attended 21 days Refresher course at HRDC Bharathiar University, Coimbatore from 05.07.2017 to 25.07.2017
- 6 Attended 14days.Refresher course at HRDC Bharathiar University, Coimbatore From 04.12.2019 to 17.12.2019.
7. Attended Training and awarded as Innovation Ambassador (Foundation Level) at MoE's Innovation Cell & AICTE from 30th June-30th July.

19) Participation in Faculty Development Programme

1. Attended an FDP on Scilab through MOOCS" from 29.04.2020-05.05.2020, organized by V.O Chidambaram College, Thoothukudi
2. From 29.04.2020 - 01.05.2020 attended an FDP on "Moodle Learning Management System" conducted by Kaypeeyes College of Arts and Science, Nilgiris...
3. Attended a 7days Faculty Development Programme on Inclusive Indian Traditions for a Holistic Global Education" organized by PSGR Krishnammal college for women in association with SHIKSHA SANSKRITI UTTHAN NYAS (TAMILNADU CHAPTER) from 03-09, May, 2020.
4. Attended an FDP on Teaching, Learning and Evaluation through Google Classroom conducted by Sri G.V.G. Visalakshi College for Women (Autonomous) Udumalpet on 13.05.2020.
5. Participated in a 4 days FDP organized by KPR College of Arts Science and Research, Coimbatore. From 16.05.2020-22.05.2020.
6. Attended 4days International Faculty Development Programme on "Role of Mathematics in Future IT and Industrial Trends organized by Nallamuthu Gounder Mahalingam College (Autonomous), Pollachi from 29.06.2020 - 02.07.2020
7. Attended 7 days International Faculty Development Programme (FDP) on Redefining Teaching Learning with the Integration of ICT organized by the Internal Quality Assurance Cell (IQAC) of Holy Cross College (Autonomous), Nagercoil from 01.07.2020 to 08.07.2020.
8. Attended 14 days, Faculty Development Programme on "Managing Online Classes and Co-Creating Moocs 3.0 organized by Teaching Learning Centre, Ramanujan College, and University of Delhi from 25.07.2020 to 10.08.2020 under the aegis of Ministry of Human Resource Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching.
9. Attended 7 days Faculty development Programme on MATLAB and its applications conducted by Dr.N.G.P Institute of technology, Coimbatore from 07.06.21 to 12.06.21

20) Invited Speaker/ Session Chair – Conference/ Seminar/ Workshop

- Delivered a Special Address on Mathematics in our daily life at Tirupur Kumaran College for women, Tirupur on 08,09.2015
- Delivered a Guest Lecture on Applied Mathematics at PSGR Krishnammal College for women, Coimbatore on March 9, 2016
- Delivered a Lecture at Dr.NGP College of Arts & Science, Coimbatore on January 23, 2016
- Delivered a Guest lecture on Recent Trends in operations Research at VLB Janakiammal college of arts and science, Kovaipudur, Coimbatore on 15.10.2018.
- Chief guest for the Mathematical association on the topic Application of O.R at Kovai kalaimagal college of arts and science, Narasipuram, Coimbatore on 23.08.18
- Was a Session Chair for the International Conference on Emerging Trends in Science and Social Science, May 3-4, 2019, Malaysia. On the session topic Basic and applied aspects of Mathematical sciences
- . On 13.09.2021, Delivered an Online orientation Programme for the Batch 21-22 for the Mathematics students at Hindustan college of arts and science, Coimbatore.

21) Member in Board of Study-In Kovai Kalaimagal College of Arts & Science

22) Editorial/ Review Board Member

- (i) Reviewer in IEEE, Transactions on Fuzzy systems (TFS)
- (ii) Reviewer in African Educational Research Journal (AERJ)
- (iii) Reviewer in Neutrosophic sets and systems (NSS)

23) Membership in Professional Bodies

Name of Professional Body	Nature of Membership	Duration
The Indian science congress association, Kolkata.	Life Membership	Since 2006
FATER Academy of India	Life member	Since 2015

24) Awards and Achievements:

Year	Name of the Award	Institution issuing the Award
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2021	Dr. Sarvapalli Radhakrishnan, Best Faculty Award 2021 in Operations Research	Centre for Professional Advancement, Vijayawada, on Account of Teachers Day on 5.8.2021
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