



**Dr. J. VIMALA**  
ASSISTANT PROFESSOR

### Contact

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### Academic Qualifications

Degree	Institution	Year	Branch	Class
Ph.D.	Alagappa University	2007	Mathematics	Highly Commended
PGDCA	Alagappa University	2003	Mathematics	First
M.Sc.	Alagappa University	2002	Mathematics	First
B. Sc.	Sri Meenakshi Govt. Arts College for women Madurai.	1988	Mathematics	First

**Teaching Experience : 16 years**

Position	Institution	Duration
Assistant Professor (Stage III)	Alagappa University.	24.05.2012- Till Date
Assistant Professor	St. Michael College of Engg& Tech, Kalaiyarkoil.	05.08.2009-23.05.2012
Assistant Professor	Chendhuran College of Engg& Tech, Pudukkottai	12.06.2008-04.08.2009

**Research Experience: 16 years**

Position	Institution / University	Duration
Assistant Professor	Alagappa University	2012-Till Date

**Academic and Additional Responsibilities**

S.No	Position	UniversityBodies	Period	
			From	To
1.	Deputy co-ordinator	SAP, DRS-I, Department of Mathematics.	2016	2021
2.	Deputy co-ordinator	Data Management Centre, Alagappa University -2020	2020	2021
3.	Deputy co-ordinator	Coaching Scheme for Entry into Services.	2018	2020
4.	Deputy co-ordinator	Coaching Scheme for Entry into Services.	2022	2024

5.	Programme Officer	NSS, Alagappa University.	2016	2023
6.	Co-ordinator	Department NIRF committee.	2023	Till date
7.	Co-ordinator	IQAC, Dept. of Mathematics.	2015	2021
8.	Co-ordinator	Alumni Association, Dept. of Mathematics	2015	2024
9.	Co-ordinator	Department Library	2015	2017
10.	Member	University Business Collaboration Centre, Alagappa University	2016	2018

#### Areas of Research

- **Soft Computing**
- **Fuzzy Mathematics**
- **Fuzzy Algebra**
- **Lattice Theory**
- **Decision Making**

#### Research Supervision/ Guidance

Program of Study		Completed	Ongoing
Research	Ph.D.	8	6
	M.Phil.	36	Nil
Project	PG	127	13

## Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books/Chapters/Monographs/Manuals
57	9	7	8	8

**Cumulative Impact Factor (as per JCR) : 60.5**

**h-index : 12**

**i10 index : 16**

**Total Citations : 435**

## Funded Research Projects

### Ongoing Projects:

S.No	Agency	Period		Project Title	Budget (Rs. in lakhs)
		From	To		
1.	EIR-RUSA 2.0 (Phase II)	December 2023	March 2024	Edge Detection in Devices Based on Linear Diophantine Fuzzy Set	0.5 lakhs.
2.	RUSA 2.0 (Phase II)	2022	2023	Mathematical Modeling and Computational Intelligence	5 lakhs

**Completed Projects:**

S.No	Agency	Period		Project Title	Budget (Rs. in lakhs)
		From	To		
1	UGC Start up Grant	2014-	2016	“A Study on L-Fuzzy sub $\lambda$ - group” -	6 lakhs
2.	RUSA 2.0 (Phase I)	2019	2021	Mathematical Modeling and Computational Intelligence	2.25 lakhs

**Distinctive Achievements / Awards**

- University Third Rank holder in M.Sc., Mathematics, Alagappa University – 2002.
- Vallal Alagappan Research Recognition Award – 2020, Alagappa University.
- Promising Researcher Award -2022, Alagappa University.
- Appreciation Award- 2023 - Best NSS Programme Officer – Collector, Sivaganga.

**Events organized in leading roles**

Number of Seminars /Conferences /Workshops/ Events organized: **21**

Position	Programme	Duration	Institution
Convenor	International Conference on Recent Development and Techniques in Pure and Applied Mathematics (ICRDTPAM 2023)	23 & 24, March 2023	School of Mathematics Alagappa University
Event Co-ordinator	Alumni Meet& Parents –	11, March 2023	School of Mathematics

	Teachers Meet		Alagappa University
Co-ordinator	State Level Quiz Contest 2022	18, March 2022	School of Mathematics Alagappa University
Event Co-ordinator	Parents –Teachers Meet	14, May 2022	School of Mathematics Alagappa University
Organizing Secretary	E-Quiz on covid -19	6, June 2020	Alagappa University
Co-ordinator	“State Level Quiz Contest 2020”	3, March 2020	School of Mathematics Alagappa University
Organizing Secretary	Advanced Training in Algebra & Analysis	20– 25 January 2020	School of Mathematics Alagappa University
Co-ordinator	National Mathematics Day	17, December 2019	School of Mathematics Alagappa University
Event Co-ordinator	Alumni Meet	8, May 2019	School of Mathematics Alagappa University
Nodal officer & Organizing Secretary	District Youth Parliament 2019	27, January 2019	Alagappa University
Event Co-ordinator	Alumni Meet& Parents – Teachers Meet	3, February 2018	School of Mathematics Alagappa University
Co-ordinator	“One day Hands – on Practice on “LATEX” – A Mathematical document tool	10 February 2017	University Business Collaboration Centre &

	preparation”		Dept. of Mathematics, Alagappa University
Event Co-ordinator	Village Placement Programme	2017	School of Mathematics Alagappa University
Co-ordinator	Two day Training Programme on “Business Skills Training on Challenges of Operating in Business Environment”	18 & 19, December 2017	University Business Collaboration Centre & Dept. of Mathematics Alagappa University
Organizing Secretary	International Workshop on Data Analysis Using SPSS (IWDAUS – 2016)	15 to 19 December 2016	School of Mathematics Alagappa University
Organizing Secretary	“National Conference on Pure and Applied Mathematics 2016 (NCPAM 2016)”	30 & 31 March, 2016	School of Mathematics Alagappa University
Member	“State Level Quiz Competition	15, February 2016	School of Mathematics Alagappa University
Co-ordinator	“National Mathematics Day”	22, December 2015	School of MathematicsAlagappa University
Co-ordinator	State Level Quiz Competition	6, February 2015	School of Mathematics Alagappa University
Event Co-ordinator	Village Placement Programme	2014	School of Mathematics Alagappa University
Member	One Day Seminar on Pure and Applied Mathematics	20, December 2012	School of Mathematics Alagappa University

## Events Participated

Number of Conferences/Seminars/Workshops: **15**

## Overseas Exposure/Visits

- Participated and presented a paper in the International Conference on Mathematical Engineering Applications for sustainable Development during July 12-13, 2019 organized by IMRF Dubai.
- Invited speaker and Session Chair in the 38<sup>th</sup> International conference held on June 03, 2016 organised by IRES, Singapore.
- Participated and presented a paper in the 5<sup>th</sup> Asian Mathematical Conference, during June 22-26, 2009 Kuala Lumpur Malaysia.

## Membership

### Professional Bodies

1. Life Member, Indian Mathematical Society
2. Life Member, Kerala Mathematical Society (L20130715)
3. Life Member, International Association of Engineers (IAENG) (119402)
4. European Society for Fuzzy Logic and Technology (EUSFLAT)
5. Member, Multiple Criteria Decision Making Society-MCDM

### Advisory Board

Year/Period	Name of the BoS/Administrative Committee / Academic Committee	Role
2013-till date	Departmental Research Advisory Committee	Member
2013-till date	Departmental Doctoral Committee	Member
2013-till date	Board of Studies for M.Sc, M.phil Mathematics, Alagappa University	Member
2019 onwards	Broad based Board of studies, Alagappa University	Member

2017 -2019	Question paper setting Board of B.Sc Mathematics Alagappa University	Chairman
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#### **Academic Bodies in Other Institutes/Universities**

<b>Year/Period</b>	<b>Name of the BoS/Administrative Committee / Academic Committee</b>	<b>Role</b>
2023- 2025	Broad based Board of studies in Mathematics,(B.Sc,M.Sc) SDNB Vaishnav College for Women, Chennai	Member
2018-2021	Broad based Board of studies in B.Sc. Mathematics, Bharathidasan University, Tiruchirappalli.	Member
2023-2025	Ph.D . Doctoral Advisory Committee-Vellore Institute of Technology, Vellore.	Member
2019-2021	Ph.D . Mathematics Doctoral Committee , Karpagam Academy of Higher Education- Coimbatore	Subject Expert
2015 onwards	Mathematics Research cell-,Sri Saradha Niketan College for Women, AmaravathiPudur	Member
2014 onwards	Question paper setting Board of Bharathiar University,Bharathidasan University, Gandhigram Rural Institute , Periyar University	Member
2015 onwards	SCDS –Springer Conference	Review Committee member
2016 onwards	ISTA – Springer Conference	Review Committee member

### Ph.D. Thesis Guided

1. No.of Ph.D. Thesis evaluated : 8
2. No.of Ph.D. Public Viva Voce Examination : 8  
conducted

S.No	Name of the Scholar	Title of the Thesis	Year of Completion
1.	D. Preethi	Fuzzy Hyperlattice Ordered Group and Its Applications in Various Domains	September 2022
2.	S. Rajareega	Complex Intuitionistic Fuzzy Soft Lattice Ordered Group	September 2022
3.	S. Sabeena Begam	Lattice Ordered Multi-Fuzzy Soft Sets	April-2022
4.	AR. Pandipriya	Lattice Approaches in Interval-Valued Hesitant Fuzzy Soft Sets	December 2021
5.	VS. Anusuya Ilamathi	Filter Theory of Residuated Lattices in Multiset Context	September-2019
6.	J. Arockia Reeta	Lattice Ordered Fuzzy Soft Groups and Their Algebraic Applications	July-2018
7.	L.Vijayalakshmi	Lattice Ordered Soft Groups	July-2018
8.	P. Bharathi	Fuzzy l-Ideals of a Lattice Ordered Group	June-2017

## List of Research Articles / Recent Publications

S. No	Authors/Title of the paper/Journal	Impact Factor
1.	AN. Surya, <b>J. Vimala</b> , Nasreen Kausar, Željko Stević , Mohd Asif Shah, “Entropy for q-rung linear diophantine fuzzy hypersoft set with its application in MADM”, Scientific Reports, 14(1), 2024. (SCIE)	4.6
2	J. Kannan, <b>V. Jayakumar</b> , M. Pethaperumal, et al, An intensified linear diophantine fuzzy combined DEMATEL framework for the assessment of climate crisis, Stoch Environ Res Risk Assess (2024). <a href="https://doi.org/10.1007/s00477-023-02618-7">https://doi.org/10.1007/s00477-023-02618-7</a> . [Springer-(SCIE) ]	4.2
3	<b>J. Vimala</b> , S. Sabeena Begam, Muhammad Saeed, Khuram Ali Khan, Atiqe Ur Rahman, “An Abstract Context to Lattice-Based Ideals(Filters) with Multi-Fuzzy Soft Setting”, New Mathematics and Natural Computation, November 2023. Doi: 10.1142/S1793005725500024 (ESCI)	1
4.	K. Jeevitha, <b>J. Vimala</b> , “Sustainable Method for Tender Selection using Linear Diophantine Multi-Fuzzy Soft Set” Communications Faculty of Science University of Ankara Series A1 Mathematics and Statistics, 72(4), 976-991, 2023 Doi: 10.31801/cfsuasmas.1255830 (ESCI)	0.9
5	<b>J. Vimala</b> , P. Mahalakshmi, A.U. Rahman and M. Saeed, A customized TOPSIS method to rank the best airlines to fly during COVID-19 pandemic with q-rung ortho pair multi-fuzzy soft information, Soft Computing, 2023. Doi: <a href="https://doi.org/10.1007/s00500-023-08976-2">https://doi.org/10.1007/s00500-023-08976-2</a> . Springer(SCIE)	4.1
6	K. Jeevitha, H. Garg, <b>J. Vimala</b> , A. Hananf, A. Aty, A. Haleem, Linear Diophantine Multi-fuzzy Aggregation Operators and its application in digital transformation, Journal of Intelligent & Fuzzy Systems, 45(2), 3097–3107, 2023, DOI: 10.3233/JIFS-223844. (SCIE)	2
7	<b>J. Vimala</b> , , H. Garg,, K. Jeevitha, Prognostication of Myocardial Infarction Using Lattice Ordered Linear Diophantine Multi-fuzzy Soft	4.3

	Set, Intelligent Journal of Fuzzy System, 2023. <a href="https://doi.org/10.1007/s40815-023-01574-2">https://doi.org/10.1007/s40815-023-01574-2</a> . Springer(SCIE)	
8.	<b>J. Vimala</b> , Ashma Banu, Muhammad Haris Saeed, Hamed Alsulami, Aftab Hussain and Muhammad Saeed, Development of Complex Linear Diophantine Fuzzy Soft set in determining a suitable Agri-drone for spraying Fertilizers and Pesticides", IEEE Access, Vol. 11, pp. 9031-9041, 2023 (SCIE)	3.9
9	S. Rajareega, <b>J. Vimala*</b> and D. Preethi, Complex intuitionistic fuzzy soft lattice ordered group associated with l-ideal, Journal of Discrete Mathematical Sciences and Cryptography, pp.1-13 (2022) (SCOPUS) ESCI	1.4
10	Harish Garg*, <b>J. Vimala</b> , S. Rajareega, D. Preethi, Luis Perez-Dominguez, "Complex intuitionistic fuzzy soft SWARA-COPRAS approach: An application of ERP software selection", AIMS Mathematics, Vol. 7, No. 4, pp. 5895-5909, 2022 (SCIE)	2.2
11.	S. Sabeena Begam, <b>J. Vimala*</b> , "Compositions on lattice ordered multi-fuzzy soft matrix and its simulated application in medical diagnosis", Mathematics and Computers in Simulation, Vol. 201, No. C, pp. 555-563, 2022, Elsevier(SCI)	4.6
12.	D. Preethi, <b>J. Vimala*</b> , S. Rajareega, Madeline Al-Tahan, "Fuzzy Hyperlattice Ordered $\delta$ - Group and Its Application on ABO Blood Group System", Journal of Intelligent & Fuzzy Systems, Vol. 41, No. 5, pp. 5309-5315, 2021 (SCIE)	1.851
13	D. Preethi, <b>J. Vimala*</b> , "Redox Reaction on Homomorphism of Fuzzy Hyperlattice Ordered Group", Journal of Intelligent & Fuzzy Systems, Vol. 41, No. 5, pp. 5691-5699, 2021 (SCIE)	1.851
14	S. Rajareega and <b>J. Vimala*</b> , "Operations on Complex Intuitionistic Fuzzy Soft Lattice Ordered Group and CIFS-COPRAS Method for Equipment Selection Process", Journal of Intelligent & Fuzzy Systems, Vol. 41, No. 5, pp. 5709-5718, 2021 (SCIE)	1.851
15	D. Preethi, <b>J. Vimala*</b> , S. Rajareega, "A systematic study in the applications of fuzzy hyperlattice", AIMS Mathematics, Vol. 6, No. 2, 1695-1705, 2020, (SCIE)	2.2
16.	Shio Gai Quek ,Ganeshsree Selvachandran , Florentin Smarandache , <b>J. Vimala</b> , Son Hoang Le , Quang-Thinh Bui and Vassilis C.	2.4

	Gerogiannis , “Entropy Measures for Plithogenic Sets and Applications in Multi-Attribute Decision Making”, Mathematics, Vol.8, No.6, 965, 2020 DOI:10.3390/math8060965. (SCIE)	
<b>17.</b>	Sabeena Begam S, <b>Vimala J</b> , GaneshsreeSelvachandran , Tran Thi Ngan*, and Rohit Sharma “Similarity Measure of Lattice Ordered Multi-Fuzzy Soft Sets Based on Set Theoretic Approach and Its Application in Decision Making”, Mathematics, Vol.8, No.8, 1255, 2020 doi:10.3390/math8081255 (SCIE)	<b>2.4</b>
<b>18.</b>	S. Rajareega, <b>J. Vimala*</b> , D. Preethi, “Complex Intuitionistic Fuzzy Soft Lattice Ordered Group and Its Weighted Distance Measures”, Mathematics , Vol.8, No.5, 705, 2020 DOI: 10.3390/math8050705. (SCIE)	<b>2.4</b>
<b>19.</b>	D.Preethi, <b>J.Vimala*</b> , Bijan Davvaz, S. Rajareega , “Biological inheritance on fuzzy hyperlattice ordered group” Journal of Intelligent & Fuzzy Systems , Vol. 38, No.5, pp.6457-6464, 2020. DOI: 10.3233/JIFS-179726. (SCIE)	<b>1.851</b>
<b>20</b>	<b>Vimala J*</b> , Vijayalakshmi L, Peng Xindong, “Lattice ordered soft group and its application in urban planning”, Journal of Intelligent & Fuzzy Systems, Vol. 38, No.3, pp. 2951-2959, 2020. DOI: 10.3233/JIFS-182662. (SCIE)	<b>1.851</b>

### Resource persons in various capacities

National Conferences : **6**

International Conferences : **6**

Invited Lectures : **14**