Dr.M.MULLAI

ASSISTANT PROFESSOR OF MATHEMATICS

PDF/ Visiting Professor : Abroad

Address	:	DEPARTMENT OF MATHEMATICS(CDOE) ALAGAPPA UNIVERSITY KARAIKUDI-630003
EmployeeNumber	:	51524
Contact Phone (Office)	:	+91 4565 223501
Contact Phone (Mobile)	:	9159658866
Contact e-mail(s)	:	mullaim@alagappauniversity.ac.in, mullai78maths@gmail.com

Academic Qualifications

Degree	Institution	Year	Branch	Class
Ph.D.	Alagappa University, Karaikudi	2012	Mathematics	-
M.Phil.,	Alagappa University, Karaikudi	2002	Mathematics	First
M. Sc.,	Alagappa University, Karaikudi	2001	Mathematics	First
PGDCA	Alagappa University, Karaikudi	2001	Mathematics	Second

Teaching Experience

Total Teaching Experience : 19 Years

Position	Institution	Duration
Assistant Professor in Mathematics	Alagappa University, Karaikudi	From 2013 – till date
Associate Professor and Head (S & H)	Sri Raaja Raajan College of Engineering and Technology, Amaravathipudur	From 2011 to 2013
Assistant Professor	St. Michael College of Engineering and Technology, Kalaiyarkoil	From 2010 to 2011
Lecturer	Veltech, Avadi,Chennai	From 2005 to 2006

Guest Lecturer	Alagappa Govt. Arts College, Karaikudi	From 2004 to 2005 and from 2006 to 2010

Research Experience

Total Research Experience   :   10   Years

Position	Institution / University	Duration
Research Supervisor	**Alagappa University**	**10**

Academic and Additional Responsibilities

S.No	Position	UniversityBodies	Period	
			From	**To**
1	Coordinator	IQAC-CDOE		Till date
2	Chairperson	Valuation Board of DDE Examinations	February 2022	Till date
3	Coordinator	PCP for For B.Sc. & M.Sc. Mathematics, CDOE	June 2020	Till date
4	Coordinator	Learning Centres	Aug 2020	Till date
5	Member of Board of Studies	Department of Mathematics	May 2019	Till date
6	Chairperson of Board of Studies	Centre for Distance and Online Education	May 2019	Till date
7	University Representative	CDOE Examinations	December 2013	Till date
8	Member	Department Research Committee	June 2013	Till date
9	Member	Ph.D Registration Interview Committee	February 2017	Till date
10	Coordinator	Programme Project Report	August	Till date

			2017	
11	Coordinator	Internal Marks committee for LSC	March 2017	Till date
12	Warden	PG Women's Hostel	03.07 2017	25.06.2023
13	Nodal officer	CDOE Online Examinations	May 2020	March 2022
14	Member	Internal Stock Verification Committee	Dec 2020	-
15	Chairman	Question Paper Setting Board of CDOE	April 2021	-
16	Member	New College Affiliation Inspection Committee	July 2019	-
17	Member	35th Inter University South Zone Festival -2019 Committee	Dec 2019	-
18	Member	squad team	April 2018	April 2019
19	Deputy Warden	PG Women's Hostel	19.02.2014	02.07 2017
20	Member	Question Paper Scrutinizing Committee, Bharathiyar University, Coimbatore	Nov'2017	-
21	Member	ODL Committee for UGC-DEB approval, CDOE	August 2017	-
22	Event Co-ordinator	Cultural club	2013	2015

Areas of Research

- Algebra,
- Fuzzy Algebra,
- Operations Research,
- Mathematical Modelling,
- Neutrosophic sets,

- Graph Theory.
- Inventory Control Theory
- Adhoc Networks

Patents Filed

- "Optimizing call center queueing system using non-markovian models and customer interaction using natural language processing", No:202041012642A dated 08.05.2020.

ResearchSupervision/Guidance

Program of Study		Completed	Ongoing
Research	PDF	-	-
	Ph.D	4	2
	M.Phil	17	-
Project	PG	72	15
	UG/ Others	-	-

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books/Chapters/Monographs/Manuals
43	21	01	15	Books-2, Book Chapters-2

Cumulative Impact Factor (as per JCR) :

h-index : 09

i10 index	: 09
TotalCitations	: 247

FundedResearchProjects

Ongoing Projects:

S.No	Agency	Period		ProjectTitle	Budget (Rs.In lakhs)
		From	**To**		
1	**RUSA 2.0**	17.09. 2019 to Till date		Mathematical Modelling and Computational Intelligence	**7.25**

CompletedProjects:

S.No	Agency	Period		ProjectTitle	Budget (Rs.In lakhs)
		From	**To**		
	AURF- Seed Money	2017-2018		A Study on various Filters in Fuzzy Lattice	**0.35**

DistinctiveAchievements / Awards

- Awarded "Best Article Award 2018" in recognition of the contribution made for Writing Best article for Neutrosophic Sets and Systems by Neutrosophic Science International Association (NSIA), University of New Mexico Math & Sciences Department 705 Gurley Ave. Gallup, NM. 87301, USA.
- Awarded "Best Article Award 2019" in recognition of the contribution made for Writing Best article for Neutrosophic Sets and Systems by Neutrosophic Science International Association (NSIA), University of New Mexico Math & Sciences Department 705 Gurley Ave. Gallup, NM. 87301, USA.
- Awarded "Admission Enhancement Recognition Award" in recognition of the contribution made towards the enhancement of number of admission during the year 2020&2021 for DDE, Alagappa University.
- Awarded "Admission Enhancement Recognition Award" in recognition of the contribution

made towards the enhancement of number of admission during the year 2020&2021 for DDE, Alagappa University.

- Awarded "Certificate of Appreciation" in recognition of participation support and contribution towards the community engagement of the event Gandhi Jayanthi celebration on 03.10.2022 by Alagappa University, Karaikudi.
- Champion in "Article writing competition 2023", Multimedia University, IJORAS, MMU Press Malaysia, 12, October, 2023.
- First Runner Up in "Article writing competition 2023", Multimedia University, IJORAS, MMU Press Malaysia, 12, October, 2023.
- Second Runner Up in "Article writing competition 2023", Multimedia University, IJORAS, MMU Press Malaysia, 12, October, 2023.

Number of Seminars /Conferences /Workshops/ Events organized: 03

Position	Programme	Duration	Institution
Organizing Committee member	"Enhancing life skills for youth belonging to scheduled caste/scheduled tribes: Special reference to affiliated college students of Alagappa University	16-18, March 2022.	Alagappa University
Organizing secratory	National Webinar on "Introduction to MATLAB"	16.05.2020	Alagappa University
Organizing Committee member	Vel – Humsci' 06 National Level Seminar,	Apr' 2006	Veltech, Chennai

Events Participated

Number of Conferences/Seminars/Workshops: 34

Oversea sExposure/Visits

- Visited Malaysia and presented a paper in International conference on recent trends in humanities & Science during 25-27, Oct' 2018.

- Visited Singapore and acted as a Resource Person in International conference on challenges and opportunities in multidisciplinary research on 28.10.2018.

Membership

Professional Bodies

- Member of Editorial board in Journal of Electrical and Electronic Engineering.
- Life Member in International Association of Engineers.
- Member of the Reviewer board in Tamkang Journal of Mathematics.(September-2016).
- Member of the Reviewer board in Asian Journal of Advanced Research and Reports.
- Member of the Reviewer board in International Journal of Neutrosophic Science.
- Member of the Reviewer board in Neutrosophic sets and systems.
- Member of the Reviewer board in Expert system with applications.
- Member of the Reviewer board in Journal of Taibah University for Science

Ph.D. Thesis Guided

1. No.of PhD Thesis evaluated : 04

2. No.of PhD Public VivaVoce Examination onducted : 04

S.No	Name of the Scholar	Title of the Thesis	Year of Completion
1	B.Balamurugan	Optimization using Non Markovian Queueing Models in Call Centers	2021
2	K. Shanmuga Priya	SP-Algebras and their Properties	2021
3	R.Surya	Modelling and Analysis of Neutrosophic Inventory System	2023
4	G.Madhan Kumar	Mathematical Modeling on Economic Issues	2024

List of Research Articles / Recent Publications

S. No	Authors/Title of the paper/Journal	Impact Factor
1	M.Mullai*, G. Madhan Kumar, Grienggrai Rajchakit* and G.Vetrivel, "Mathematical modeling on the transmission dynamics of Zika virus", International Journal on Robotics, Automation and Sciences (2023) 5,2:79-84 https://doi.org/10.33093/ijoras.2023.5.2.9	-
2	M.Mullai*, G. Madhan Kumar, Grienggrai Rajchakit* and G.Vetrivel, "Transmission dynamics of smoking- a mathematical model", International Journal on Robotics, Automation and Sciences (2023) 5,2:89-93 https://doi.org/10.33093/ijoras.2023.5.2.11.	-
3	M.Mullai*, G.Vetrivel, Grienggarai Rajchakit* and G.Madhan Kumar, " Neighbourly Edge Irregularity on Interval-valued Pythagorean Neutrosophic Graph", International Journal on Robotics, Automation and Sciences (2023) 5,2:54-58, https://doi.org/10.33093/ijoras.2023.5.2.6	-
4	R. Meenakshi, M. Mullai, et.al.," Neutrosophic Fuzzy lattice Via Fuzzy Partial Ordering", International Journal of Neutrosophic Science (IJNS) Vol. 21, No. 01, PP. 64-68, 2023.	2.14
5	G.Madhan Kumar and M. Mullai, "Deterministic and stochastic optimal control models for plant growth using locust fertilizer", Modeling Earth Systems and Environment, https://doi.org/10.1007/s40808-022-01596-z.	3
6	G. Madhan Kumar and M. Mullai," Modeling social media addiction with case detection and treatment", Stochastic Analysis and Applications, https://doi.org/10.1080/07362994.2022.2087677	1.725
7	R. Surya and M. Mullai, "Neutrosophic multi-item inventory control models with constraints", Journal of Intelligent & Fuzzy Systems 43 (2022) 8127–8136, DOI:10.3233/JIFS-221143, IOS Press.	2
8	M. Mullai, S. Broumi, P.K.Santhi, " Inverse Dominating Set in Neutrosophic Graphs", International Journal of Neutrosophic Science (IJNS) Vol. 18, No. 3, PP. 104-110, 2022.	2.14
9	M.Mullai., S.Broumi., et.al.,"Equitable Domination in Neutrosophic Graphs", Journal of Neutrosophic and Fuzzy Systems (JNFS) Vol. 2, No. 2, PP. 57-61, 2022.	-
10	M.Mullai., S.Broumi., et.al.," Split Domination in Neutrosophic Graphs", Neutrosophic Sets and Systems, Vol. 47,240-249, 2021.	2.34

11	M. Mullai, R. Surya., et.al., "A Single Valued Neutrosophic Inventory Model with Neutrosophic Random Variable", Vol. 1, No. 2, PP. 52-63, 2020, International Journal of Neutrosophic Science (IJNS).	2.14
12	M. Mullai and R. Surya., " Neutrosophic inventory model under immediate return for deficient items", Annals of Optimization Theory and Practice, Volume 3, Number 4, 1-9 December 2020 DOI: 10.22121/aotp.2020.246194.1040.	-
13	M. Mullai and R. Surya., "Neutrosophic Inventory Backorder Problem Using Triangular Neutrosophic Numbers", Vol. 31, 148-155, 2020, Neutrosophic Sets and Systems, University of New Mexico, USA.	2.34
14	B. Balamurugan and M. Mullai, "Non Markovian Priority Queue for Existing Customer with Breaks in Call Center", Vol.82, 7598- 7610, TEST, The Mattingley Publishing Co., Inc.	1.3
15	B. Balamurugan, M. Mullai, et.al., "Brain–computer interface for assessment of mental efforts in e-learning using the non markovian queueing model", Comput. Appl. Eng. Educ. 2020, 1–17. https://doi.org/10.1002/cae.22209.	0.651
16	M.Mullai., S.Broumi., et.al.," Neutrosophic Intelligent Energy Efficient Routing for Wireless Ad-hoc Network Based on Multi-criteria Decision Making", Vol. 30, 113-121, 2019, Neutrosophic Sets and Systems, University of New Mexico, USA.	2.34
17	B. Balamurugan and M. Mullai, "Rejection and Breaks in Pharmaceutical Call Center", Vol. 11 , Issue 4, 2019, International Journal of Pharmaceutical Research.	0.34
18	B.Balamurugan and M.Mullai, "Two-Stage Various Service with Unavoidable Abandonment and Random Breaks in Pharmaceutical Call Center", International Journal of Pharmaceutical Research, 2019.	0.34
19	M. Mullai, Said Broumi, R.Jeyabalan, "Homomorphism and Isomorphism in strong neutrosophic graphs", Vol. 0, No. 1, PP. 08-20, 2019, International Journal of Neutrosophic Science (IJNS).	2.14
20	B.Balamurugan and M.Mullai," Non Markovian Feedback Queue with Two Stage different Service and constant Server breaks", Volume 6, Issue 2,634-644, 2019, International Journal of Research and Analytical Reviews.	4.236
21	M.Mullai., S.Broumi., et.al.," A Neutrosophic Technique Based Efficient Routing Protocol For MANET Based On Its Energy And Distance" Neutrosophic Sets and Systems, Vol. 24, PP.61-69, 2019, University of New Mexico, USA.	2.34
22	M. Mullai and R. Surya, "Neutrosophic project evaluation and review techniques" Neutrosophic Sets and Systems, Vol. 24, PP.1-9, 2019, University of New Mexico, USA.	2.34

23	G.Madhan Kumar and M.Mullai, "Whether Government intervention and Vocational training increases Education and Employment? A mathematical model", International Journal of Pure and Applied Mathematics, Volume 118 No. 10 2018, 435-454.	**7.19**
24	G.Madhan Kumar and M.Mullai, "Stability analysis on the dynamics of poverty, corruption and diseases: A mathematical model", Asian Journal of Mathematics and Computer Research, 23(2): 104-123, 2018. [ISSN: 2395-4205 (Print), 2395-4213 (Online)]	**-**
25	M. Mullai and S. Broumi, "Neutrosophic inventory model without shortages", Asian Journal of Mathematics and Computer Research, 23(4): 214-219, 2018. [ISSN: 2395-4205 (Print), 2395-4213 (Online)]	**-**
26	M. Mullai and R. Surya, "Neutrosophic EOQ Model with Price Break", Neutrosophic Sets and Systems, Vol. 19: 24-28, 2018. [ISSN (print): 2331-6055, ISSN (online): 2331-608X] http://doi.org/10.5281/zenodo.1235249	**2.34**
27	K.Shanmuga Priya and M.Mullai," Direct product of SP-Algebra", Journal of Global Research in Mathematical Archives, Vol.5(5), 90-94, 2018.	**-**
28	B. Balamurugan and M. Mullai, "Analysis of a non-markovian group arrival Queue with balking and two types of Various services in call centers", Mathematical sciences international research journal, volume 7 spl issue 1, ISSN: 2278-8697, 2018.	**-**
29	B. Balamurugan and M. Mullai, "Analysis of a non-markovian group arrival Queue with balking and Bernoulli schedule server breaks in call centers", Volume 119 No. 12 2018, 14313-14320, International Journal of Pure and Applied Mathematics.	**7.19**
30	M.Mullai., S.Broumi., et.al.," Single valued (2n+1) sided polygonal neutrosophic numbers and single valued (2n) sided polygonal neutrosophic numbers", Neutrosophic Sets and Systems, Vol. 25, PP.54-65, 2018, University of New Mexico, USA.	**2.34**

31	K. Shanmuga Priya and M. Mullai, Polynomials on SP-Ring, international Journal of Computer Science, Volume 6, Issue 1, No 04, 2018 ISSN: 2348-6600, http://www.ijcsjournal.com.	-
32	M. Mullai and A. Stephen, Neutrosophic critical path analysis for Project network, Asian Journal of Mathematics and Computer Research, 21(1): 28-35, 2017, ISSN: 2395-4205 (P), ISSN: 2395-4213 (O)	-
33	K.Shanmuga Priya and M.Mullai, "SP-RING AND ITS PROPERTIES", International Journal of Mathematics Trends and Technology, vol.46(2), June -2017.	2.45
34	M. Mullai, S. Broumi and A. Stephen, "Shortest path problem by minimal spanning tree algorithm using bipolar neutrosophic numbers", International Journal of Mathematics Trends and Technology, vol.46(2), June -2017.	2.45
35	M. Mullai and A. Stephen, "Neutrosophic critical path analysis for project network", Asian Journal of Mathematics and Computer Research, 21(1): 28-35, 2017.	-
36	M.Mullai, Fuzzy L-Quotient Filters, Imperial Journal of Interdisciplinary Research (IJIR), Vol-3, Issue-3, 2017, ISSN: 2454-1362, http://www.onlinejournal.in	-
37	M.Mullai, (2016) "Prime fuzzy L-filters", International Journal of Applied Mathematical Sciences, Volume 9, Number 1, pp. 37-44.	-
38	M.Mullai,(2016), "Prime Fuzzy L-filters", NCPAM- 2016, Alagappa University, Karaikudi.	-
39	M.Mullai, (2016), "Railway Route Optimization System using Fuzzy Dijktra's Algorithm", IWCAAM -2016, NIT, Trichirappalli.	-
40	M.Mullai, (2016), "Railway Route Optimization system using fuzzy Dijktra's Algorithm" , International Journal of Applied Mathematical Sciences ,Volume 9, Number 1, pp. 117-123.	-
41	M.Mullai, (2013), "Some Theorems on Fuzzy L-Ideals", Antarctica Journal of Mathematics, Vol. 10(2), 103-106	-
42	M.Mullai,(2013), "Fuzzy L-Quotient Ideals", International Journal of Fuzzy Mathematics and Systems, Vol. 3(3),179-187.	-
43	M.Mullai, (2012), "Fuzzy L-filters", IOSR Journal of Mathematics (IOSRJM),Volume 1, Issue 3, 21-24.	-
44	M.Mullai, (2009), " Fuzzy L-ideal ", Acta Ciencia Indica, 2009,Vol.XXXV M, No.2, 525-533.	-

Resourcepersonsin variouscapacities

National Conferences	:	01
InternationalConferences	:	04
InvitedLectures	:	04

Date   :   27.02.2024

Place   :   KARAIKUDI

(Signature)

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ASSISTANT PROFESSOR