Profile



PERSONAL INFORMATION

Name : Dr. A. ARIVU CHELVAM

Designation : Associate Professor

Department: PG and Research Department of Mathematics

Field of Specialization: Topology

Graph Theory

E-Mail ID : arivumtnc@gmail.com

Contact No : 9894446217

Date of Birth : 20.10.1978

Guideship : 03.07.2020

Appointment : 23.08.2007

Gender : Female

Address: 5/582 Nakkeerar Street, Sadha Siva Nagar, Anna Nagar,

Madurai, Tamil Nadu.

Academic Qualifications:

Doctoral Research Ph.D

University: Madurai Kamaraj University, Madurai, India

• Title: Studies on New Bitopological Sets, Functions and Spaces

• Year: 2017

Master of Philosophy

• University: M.T.N College, Madurai / MKU

• Year: 2003

Post Graduation

• University: N.M.S. Sermathai Vasan College For Women, Madurai / MKU

• **Degree:** Master of Science in Mathematics

• Year: 2002

Under Graduation

• University: N.M.S. Sermathai Vasan College For Women, Madurai / MKU

• **Degree:** Bachelor of Science in Mathematics

• Year: 2000

Teaching Experience:

Work Experience:

• 2005-2007 Worked as an Assistant Professor in Mannar Thirumalai Naicker College (SSC), Madurai

• From 2007 - Working as an Assistant Professor in the Regular Stream in Mannar Thirumalai Naicker College, Madurai.

Awards/Prize/Certificate/Fell

Received an Orange World Record BestTeacher Award at Malaysia on 05th Sep 2020

Orientation / Refresher Course Attended (other than MTNC):

- Participated in an orientation programme at Madurai Kamaraj University on August 2010
- Attended a refresher course entitled "Recent Trends in Advanced Mathematics" at Madurai Kamaraj University on February 2013
- Attended a refresher course entitled "Advances in Analysis, Algebra and Differential" at Madurai Kamaraj University on December 2015
- Attended a refresher course entitled "Mathematics and Statistics" at Bharathiar University, on 08-09-2021 to 21-09-2021
- Attended a refresher course entitled "Mathematics and Statistics" at Sardar Patel University, on 14-11-2022 to 27-11-2022.

Details of Ph.D Candidates:

Pursuing: 4

S. No	Name of the Scholar with Register Number	Title of the Thesis	Date of Registration
1.	R. Sumathi	A Study on New Ideal Tri Topological	
	MKU21FFOS10075	Spaces.	21.06.2021
	S. Mukesh Parkavi	Studies on New Generalization of Closed	
2.	MKU22FFOS10361	and Open Sets in Intuitionistic Fuzzy Bitopological Spaces.	14.02.2022
3.	M. Kumar	Contribution to the Theory of Tri	
	MKU22PFOS10382	Topological Spaces.	07.03.2022
4.	M. Bala Murugan	Study of Dynamic Traffic Vehicle Signal	
	MKU24PFOS11392	Flow Stability Analysis Using Complex Networks Topological Optimization Techniques	20.03.2024

Details of M.Phil Candidates:

Submitted: 1

S. No	Name of the Scholar with Register Number	Title of the Thesis	Year of Submission
1.	P. Santha 207215EP130	IASL-Graphs and Other Discrete Structures.	2022-2023

Publications (List of papers published, in year wise descending order):

- Contra g^* -Continuity and Separation Axioms, International Journal of Current Research in Science and Technology, Vol 1, Issue 4, 2015.
- A Study New Type of Functions $(1,2)^*$ -g''' Closed Sets on Bitopological Spaces, Shanlax International Journal of Arts, Science and Humanities, Vol.4, Special Issue 4, 2017.
- (1,2)*-g"' Interior and (1,2)*-g"' Closure in Bitopological Spaces, International Journal of Research in Engineering Application and Management, Vol. 4, Issue 2, May 2018.
- Decomposition of $(1,2)^*$ -g''' Continuity in Bitopological Spaces, International Journal of Research in Engineering Application and Management, Vol. 4, Issue 2, May 2018.
- On (1,2)*-g'''Regular Space in Bitopological Spaces, International Journal of Scientific Research and Review, Vol.7, June 2018.
- On the classes of (1,2)*-Open Sets in Bitopological Spaces, International Journal of Mathematics Trends and Technology, Vol. 66, Feb 2020.

- Compactness Via Ideal in Bitopological Spaces, Gorteria Journal, Vol.34, Issue 8, Aug 2021.
- Γ- Open Sets in Tri Topological Spaces, Indian Journal of Natural Sciences, Vol.13, Issue 71, April 2022.
- On $(1,2)^*$ - $\alpha r\omega$ Irresolute Maps in Bitopological Spaces, Indian Journal of Natural Sciences, Vol.13, Issue 73, Aug 2022.
- On (1,2)*- RPS Connected in Bitopological Spaces, Indian Journal of Natural Sciences, Vol.13, Issue 75, Dec 2022.
- On $(1,2)^*$ - \ddot{g} Closed Sets in Intuitionistic Fuzzy Bitopological Spaces, Indian Journal of Natural Sciences, Vol.14, Issue 76, Feb 2023.
- Properties of (1,2)*-G* Closed Sets in Bitopological Spaces, Indian Journal of Natural Sciences,
 Vol.14, Issue 76, Feb 2023.
- Estimating Crops Yield Using Intuitionistic Fuzzy Topology, Pramana Research Journal, Vol.1, Issue
 3, March 2023.
- Properties of (1,2)*-*G** Closed Sets in Tritopological Spaces, GIS Science, Vol.10, Issue 10, Oct 2023.
- On $(1,2)^*$ - β Open and $(1,2)^*$ - β Closed Sets in Fuzzy Bitopological Spaces, YMER, Vol.22, Issue 12, Dec 2023.
- On (1,2)*-\(\beta\) Continuous Function in Intuitionistic Fuzzy Bitopological Spaces, Indian Journal of Natural Sciences, Vol.15, Issue 83, April 2024.
- Tritopological Groups Via Semi Open Sets, Indian Journal of Natural Sciences, Vol.15, Issue 84,
 June 2024.

Research Articles Published in Proceedings:

- Women Empowerment- Milestones and Challenges, Nation Conference on Women Development, 8th Oct 2015.
- $(1,2)^*$ g''' Homeomorphism and Separation Axioms, National Conference on Present Scenario in Group Theory, ISBN No: 978-93-85977-68-8, 16^{th} Dec 2016.
- Value Education (21UVLG21), Mannar Thirumalai Naicker College, Pasumalai, Madurai, From 2021-2022.
- b3-open Set and Closed Set in Tri topological Space, International Conference on Mathematical Analysis in Computational Biology and Data Science, ISBN No: 978-81-960660-4-8, 24th Jan 2023 25th Jan 2023
- Application of Mathematics Concepts in Architecture of Thirumohur Temple, 11th World Tamil Research Conference, ISBN No. 978-81-953243-2-3, 21th July 2023 to 23rd July 2023.

Paper presented in Conference/Seminar:

- A Study on Contra g*- Continuous maps presented in National Level Conference on Applicable Mathematics and Mathematical Methods at Sivakasi Nadars Pioneer Meenakshi Women's College, 28th Dec 2013
- A Study on (1,2)*- g''' Homeomorphism presented in National Level Conference on Modern Trends in Applications of Mathematics at Sourashtra Arts College, 28th Feb 2013.
- Women Empowerment presented in National Level Conference on Women Development at S. Vellaichamy Nadar College, 8th Oct 2015.
- A Study on New (1,2)*-g" Locally Closed Sets, International Conference on application of Mathematics in Science and Technology at AAA College of Engineering and Technology 26th July 2019.
- Generalized b Closed sets in Ideal Tritopological Spaces presented in International Level Conference on Exploration of Comtemporary Mathematical Sciences -2022 at MTNC, 17th Mar.2022 & 18th Mar 2022.
- On (1,2)*-ατω Continuous Maps in Bitopological Spaces presented in International Level Conference on Exploration of Comtemporary Mathematical Sciences -2022 at MTNC, 17th Mar.2022 & 18th Mar 2022.
- Application of Nano Topology in Micro Factors for Mucormyscosis (Black Fungus) presented in National Level Conference on Present Scenario in Mathematical Research at MTNC, 22nd Apr 2022.
- Properties of (1,2)*-*G** Closed Sets in Bitopological Spaces, presented in National Level Conference on Present Scenario in Mathematical Research at MTNC, 22nd Apr 2022.
- On (1,2)*-αrω Irresolute Maps in Bitopological Spaces presented in International Level Conference on Analysis and Applied Mathematics at ANJAC, 26th Apr 2022 & 28th Apr 2022.
- Estimating Crops Yield Using Intuitionistic Fuzzy Topology, presented in National Level Conference on Current Trends in Applied & IPR-2022 at MTNC, 7th Oct 2022.
- Application of Mathematics Concepts in Architecture of Thirumohur Temple Presented on 11th World Tamil Research Conference at University of Malaya, 21th July 2023 to 23rd July 2023.
- Fuzzy Generalized Semi Preregular Closed Sets in Fuzzy Bitopological Spaces presented in International Level Conference on Interdisciplinary Approaches in Mathematics and Physical Sciences at Shrimati Indira Gandhi College, 20th Sep 2023.
- Properties of (1,2,3)*-*G** Closed Sets in tri topological Spaces presented in National Level Conference on Application of Mathematics in Digital Era at Hajee Karutha Rowther Howdia College, 06th Oct 2023.

- On $(1,2)^*$ - \ddot{g} Homeomorphism in Intuitionistic Fuzzy Bitopological Spaces presented in National Level Conference on Recent Advancements in Pure and Applied Mathematics (RAPAM-2024) at MTNC, 15th Mar 2024.
- Tritopological Group Via Semi Open Sets presented in National Level Conference on Recent Advancements in Pure and Applied Mathematics (RAPAM-2024) at MTNC, 15th Mar 2024.

Detail of Project:

S. No.	Project Tittle	Amount	Agency	Year
1	A study On New (1,2)*- g''' interior and (1,2)*- g'''closure in Bitopological spaces	3,00,000	UGC	Aug 2015
2	A Study on Decompositions of (1, 2)*- g'''Continuity in Bitopological Space	550000.00	NBHM	Aug 2017
3	Application of Nano Topology in finding mainfactors for Mucormycosis (Black fungus)	10,000	Institutional Sponsored Research Project	Oct 2021
4	Estimating Crops Yield Using Intuitionistic Fuzzy Topology	12,500	Institutional SponsoredResearch Project	Sep 2022

FDP/ Workshop Attended (other than MTNC):

S. No.	Title of the FDP/ Workshop	Name of the Institution/University	DD/MM/YYYY
1	Basics of Recent Trends in Mathematics	H.H. The Rajahs College	21.03.2019
2	Modern Trends in Applications of Mathematics	Arul Anandar College	25.02.2014
3	Research Process Engineering effective and for Quantitative Research	G. T. N Arts College	28.02.2017
4	Opportunities and Challenges in the Emerging Spaces of Higher Education	Sri Meenakshi Government College for Women	04.09.2019
5	Webinar on Online Teaching and Learning	G. T. N Arts College	09.05.2020

6	Webinar on Qualitative Analysis of Differential Equations and its Applications	G. T. N Arts College	27.05.2020
7	Three Days National Level Online Course on Operation Research	VHN Senthilkumar Nadar College	18.05.2020 to
8	Mathematics E-Quiz	Sengunthar Arts and	20.05.2020 25.05.2020
		Science College	
9	Key issues in Research Methodology	G. T. N Arts College	03.06.2020
10	Online Awareness Quiz on Covid-19	PSNA College of	01.06.2020
10		Engineering and	to 03.06.2020
		Technology	03.00.2020
11	Three Days International Webinar on Graph Theory and Human Factors in	G. Venkataswamy	03.06.2020
	Aviation	Naidu College	to 05.06.2020
12	Three Day Online FDP on Recent	St. Josephs	28.05.2020
12	Advances in Graph Theory	College of Engineering	to 30.05.2020
12	Online Faculty Development	Marry Matha College	06.06.2020
13	Programme - Challenges for college teachers in the new educational scenario	of Arts & Science	
1.4	Online Training on MathematicalSkills	Raja Doraisingam	25.05.2020 to
14	for Competitive Exams	Government Arts	31.05.2020
		College, Sivagangai	
15	Online FDP on Introduction to fuzzy	Mepco Schlenk	10.06.2020
	sets and its Generalization	Engineering College,	
		Sivakasi	
16	E-Quiz on Mathematics	Rohini College of	03.06.2020
		Engineering &	
		Technology	
17	Webinar on Fuzzy logic and its Applications	Rohini College of	12.06.2020
	Applications	Engineering &	
		Technology	
18	One day webinar on Residue Theory and its Applications	G .Venkataswamy	12.06.2020
	and its rippinoutions	Naidu College,	
		Kovilpatti	
19	Webinar on fourth state of matter and its Applications	G. Venkataswamy	15.06.2020
	по тррношново	Naidu College,	
		Kovilpatti	
20	Webinar on Polynomials associated with Graph	Tirunelveli Dakshina	15.06.2020
	with Gruph	Maranadarsangam	
		College	

	21	E-Quiz on Astropics	Madonna Arts & Science College for	15.06.2020
			Women, Madurai	
	22	Webinar on Graph embedding	Don Bosco College of	16.06.2020
			Arts and science	
	23	E Quiz on Pure Mathematics	Vel Tech High Tech	16.06.2020
	24	E Quiz on Investment Management	Saraswathi Narayanan College	17.06.2020
	25	Webinar on Edge Colouring in Graphs	,	18.06.2020
			Pope's college	18.00.2020
			(Autonomous),	
	26	National Webinar on Mathematical	Sawyerpuram	20.06.2020
		Analysis and Topology	G. Venkataswamy	20.00.2020
			Naidu College,	
	27	A Three Days National Level Webinar	Kovilpatti Government Arts	22.07.2020
		on Recent Trends in Graph Theory		22.06.2020- 24.06.2020
	28	Online Quiz on Basic linear Algebra	College, Paramakudi VHN Senthilkumara	02.07.2020
			Nadar College	02.07.2020
	29	International e-Quiz on Global	F D.	02.07.2020
		Mathematicians	Forum De	03.07.2020
			Mathematicians, Tamil Nadu, India	
	30	Online test on Quantitative Aptitude		
		for Placements and Competitive	Yadava College, Madurai	04.07.2020
	31	Examinations Online NSS - Quiz (2020)		
	31	Ollime 1455 - Quiz (2020)	Umamaheswaranar	05.07.2020
			Karanthai Arts College,	
	32	National E Quiz on Genius of	Thanjavur	
	32	Mathematics	Mangayarkarasi	08.07.2020
			College of Arts and	
	33	Online Quizophile 2020 Competition	Science for Women	
	33	Online Quizophile 2020 Competition	EGS Pillay Group of	09.07.2020
			Institutions,	
	34	Webinar on Soft Competing By Soft	Nagapattinam	
	34	Sets	Don Bosco College of	10.07.2020
	35		Arts and Science	
	33	Recent Trends in Theoretical and	PSGR Krishnammal	24.02.2022
		Computational Mathematics (Virtual Mode)	College	&
_	26	,		25.02.2022
	36	Workshop on "NIRF Indian Ranking - 2023"	Madurai Kamaraj	20.12.2022
			University	30.12.2022

37	Machine Learning: An Ice Breaker between Materials Research and Data Science	Chennai.	12.04.2023 & 13.04.2023
38	Workshop on "NIRF Indian Ranking - 2024"	Madurai Kamaraj University	9.10.2023

Workshop/Conference/FDP Attended in MTNC:

S. No.	Title of the FDP/ Workshop / conference	Name of the Institution/University	DD/MM/YYYY
1	Recent Trends in Mathematical Models	MTNC	Aug 2014
2	Advances in Stochastic Modeling	MTNC	8.01.2013 to 10.01.2013
3	Recent Trends in Applied Mathematics	MTNC	14 .08.2015
4	Two days workshop on Preparation for UGC CSIR NETExamination in Mathematics	MTNC	22.09.2017 & 23.09.2017
5	A One day faculty development programme	MTNC	4 .03.2017
6	Faculty development programme on Online Teaching, Learningand Assessment, Using Moodle, MOOC Platform, Open Educational Resource and EDUCATION Technology Tools	MTNC	23.10.2017 & 24.10.2017
7	Faculty development programme on e- Content Development and Digital Tools	MTNC	2.03.2018 & 3.03.2018
8	Workshop on Technicalities of Writing Research Proposal	MTNC	29.06.2018
9	Faculty development programme on Intellectual Property Rights, Skills Development Programme, Innovations, Patents and settingup incubation centers	MTNC	22 .01.2019
10	Faculty Development Programme on Promotion of API and CASFiling	MTNC	2.03.2019
11	Faculty Development Programme on One who can do, Teachers, How to do? and what to do	MTNC	8 .03.2019
12	Faculty Development Programme on one day training and production workshop on prospects of outcome-based curriculum	MTNC	9 .03.2019

13	Faculty Development Programme on one day capacity buildingprogramme on outcome-based education	MTNC	28 .08.2019
14	One day workshop on Research writing and publication: Theoryand Practice	MTNC	19.10. 2019
15	Applied Mathematics and IPR	MTNC	20 .12.2019
16	Faculty Development Programme on e- content development and digital tools usage	MTNC	29 .02.2020
17	Faculty Development Programme on Promotion of API Scoreand Career Advancement Scheme	MTNC	03.03.2020
18	Faculty Development Programme on 21 Century Skills	MTNC	05 .03.2020
19	Faculty Development Programme on Quality Assurance and Sustenance in Higher Education	MTNC	11.03.2020
20	Faculty Enrichment Programme	MTNC	13.05.2020 to 19.05.2020
21	E-Quiz on Soft Skills	MTNC	06.06.2020
22	Online Quiz on Organizational Behavior	MTNC	13.06.2020
23	Recent Trends in Mathematical Modeling	MTNC	27.06.2020
24	Data Science in e-commerce	MTNC	23.07.2021
25	International Conference on Exploration of Comtemporary Mathematical Sciences -2022	MTNC	17.03.2022 & 18.03.2022
26	National Conference on Present Scenerio in Mathematical Research	MTNC	22.04. 2022
27	Faculty Enhancement Programme on Education 4.0 for Sustainable Economic Development	MTNC	27.04.2022
28	Faculty Research Programme on Dynamics of Research Publications	MTNC	15.09.2022 & 16.09.2022
29	World Record of Date of Birth Magic Square for Srinivasa Ramanujan	MTNC	22.12.2022
30	National Science Day/ National Mathematics Day Celebration	MTNC	21.12.2022 & 22.12.2022
31	Faculty Enhancement Programme on Insights of National Educational Policy (NEP 2020)	MTNC	18.03.2023

		MTNC	16.10.2023 &
32	Technical Workshop on "Intellectual Property		18.10.2023
	Rights"		

Number of Conferences, Seminars, Workshops and other Programmes Organized:

S. No	Date	Name of the Programme	Role	Name of the Institution
1.	10.03.2020	Students Enhancement Programme on	Organizing	MTNC
1.	10.03.2020	Swayam - NPTEL & Online Courses	Secretary	
2.	08.04.2022	Capacity Building Programme on Essential	Organizing	MTNC
	08.04.2022	Skills for Enormous Success	Secretary	
3.	07.10.2022	National Seminar on Current Trends in	Organizing	MTNC
		Applied Mathematics & IPR - 2022	Secretary	
4.	17.03.2023	Faculty Enhancement Programme on	Organizing	MTNC
		Consultancy and Corporate Training	Secretary	

Subject Expert/Member in Board of Studies

 Board of Studies meeting at S. Vellaichamy Nadar College, Nagamalai, Madurai on 26.03.2021 for National Service Scheme acted as Subject Expert.

Acted as Resource Person

 Delivered a lecture Speed and Mind MATH Tricks in Three Days State Level Technical Workshop on Math Teachers Training through Low Cost Teaching Aids organized by PG and Research Department of Mathematics, Mannar Thirumalai Naicker College, Madurai on 07.07.2022 jointly organized by Tamilnadu State Council for Science and Technology, Chennai from 06.07.2022 to 08.07.2022.

Acted as External Examiner

- Acted as External Examiner at Fatima College, Mary land, Madurai on 26.03.2024 for Project Viva Voce Examinations (UG).
- Acted as External Examiner at Madurai Kamaraj University, Madurai on 15.10.2024 for Ph.D Public Viva-Voce Examination.

Other Services Rendered in the College

(NAAC, IQAC, Sports, Cultural Activities, Hostel, Department Association, Placement, Club, Examination, etc.,)

S. No	Name of the Activity	Period
1.	NSS Programme Officer	2018-2021
2.	NSS Advisory Committee Convenor	2021-2023
3.	Women Development Cell Convenor	2019-2020
4.	Women Development Cell Member	2018-2019 2020-2023
5.	NAAC & IQAC Member	2018-2023
6.	Calendar Committee Convenor	2022-2023
7.	Research Committee Member	2022-2023

W. Dim Chil

Signature of the Faculty (Affix Scanned Copy of Signature)