

# Profile



## PERSONAL INFORMATION

**Name** : Dr. A. ARIVUCHELVAM

**Designation** : Associate Professor

**Department** : PG and Research Department of Mathematics

**Field of Specialization** : Topology  
Graph Theory

**E-Mail ID** : [arivumtnc@gmail.com](mailto: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 05<sup>th</sup> 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 MKU21FFOS10075	A Study on New Ideal Tri Topological Spaces.	21.06.2021
2.	S. Mukesh Parkavi MKU22FFOS10361	Studies on New Generalization of Closed and Open Sets in Intuitionistic Fuzzy Bitopological Spaces.	14.02.2022
3.	M. Kumar MKU22PFOS10382	Contribution to the Theory of Tri Topological Spaces.	07.03.2022
4.	M. Bala Murugan MKU24PFOS11392	Study of Dynamic Traffic Vehicle Signal 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.
- $\Gamma$ - Open Sets in Tri Topological Spaces, Indian Journal of Natural Sciences, Vol.13, Issue 71, April 2022.

- On  $(1,2)^*$ - $ar\omega$  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  $(1,2)^*$ - $\tilde{g}$  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  $(1,2)^*$ - $\beta$  Open and  $(1,2)^*$ - $\beta$  Closed Sets in Fuzzy Bitopological Spaces, YMER, Vol.22, Issue 12, Dec 2023.
- On  $(1,2)^*$ - $\tilde{g}$  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, 8<sup>th</sup> 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<sup>th</sup> Dec 2016.
- A Study on New  $(1,2)^*$ - $g'''$  Locally Closed Sets, International Conference on application of Mathematics in Science and Technology, 26<sup>th</sup> July 2019.
- $b\mathfrak{S}$ -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, 24<sup>th</sup> Jan 2023 - 25<sup>th</sup> Jan 2023
- Application of Mathematics Concepts in Architecture of Thirumohur Temple, 11<sup>th</sup> World Tamil Research Conference, ISBN No. 978-81-953243-2-3, 21<sup>th</sup> July 2023 to 23<sup>rd</sup> 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, 28<sup>th</sup> 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, 28<sup>th</sup> Feb 2013.
- Women Empowerment presented in National Level Conference on Women Development at S. Vellaichamy Nadar College, 8<sup>th</sup> 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 26<sup>th</sup> July 2019.
- Generalized  $b$  - Closed sets in Ideal Tritopological Spaces presented in International Level Conference on Exploration of Contemporary Mathematical Sciences -2022 at MTNC, 17<sup>th</sup> Mar.2022 & 18<sup>th</sup> Mar 2022.
- On  $(1,2)^*-\alpha\omega$  Continuous Maps in Bitopological Spaces presented in International Level Conference on Exploration of Contemporary Mathematical Sciences -2022 at MTNC, 17<sup>th</sup> Mar.2022 & 18<sup>th</sup> Mar 2022.
- Application of Nano Topology in Micro Factors for Mucormycosis (Black Fungus) presented in National Level Conference on Present Scenario in Mathematical Research at MTNC, 22<sup>nd</sup> 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, 22<sup>nd</sup> Apr 2022.
- On  $(1,2)^*-\alpha\omega$  Irresolute Maps in Bitopological Spaces presented in International Level Conference on Analysis and Applied Mathematics at ANJAC, 26<sup>th</sup> Apr 2022 & 28<sup>th</sup> Apr 2022.
- Estimating Crops Yield Using Intuitionistic Fuzzy Topology, presented in National Level Conference on Current Trends in Applied & IPR-2022 at MTNC, 7<sup>th</sup> Oct 2022.
- Application of Mathematics Concepts in Architecture of Thirumohur Temple Presented on 11<sup>th</sup> World Tamil Research Conference at University of Malaya, 21<sup>th</sup> July 2023 to 23<sup>rd</sup> 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, 20<sup>th</sup> 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, 06<sup>th</sup> Oct 2023.
- On  $(1,2)^*-\tilde{g}$  Homeomorphism in Intuitionistic Fuzzy Bitopological Spaces presented in National Level Conference on Recent Advancements in Pure and Applied Mathematics (RAPAM-2024) at MTNC, 15<sup>th</sup> 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, 15<sup>th</sup> Mar 2024.

**Detail of Project :**

S. No.	Project Title	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 Sponsored Research 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 20.05.2020

8	Mathematics E-Quiz	Sengunthar Arts and Science College	25.05.2020
9	Key issues in Research Methodology	G. T. N Arts College	03.06.2020
10	Online Awareness Quiz on Covid-19	PSNA College of Engineering and Technology	01.06.2020 to 03.06.2020
11	Three Days International Webinar on Graph Theory and Human Factors in Aviation	G. Venkataswamy Naidu College	03.06.2020 to 05.06.2020
12	Three Day Online FDP on Recent Advances in Graph Theory	St. Josephs College of Engineering	28.05.2020 to 30.05.2020
13	Online Faculty Development Programme - Challenges for college teachers in the new educational scenario	Marry Matha College of Arts & Science	06.06.2020
14	Online Training on Mathematical Skills for Competitive Exams	Raja Doraisingam Government Arts College, Sivagangai	25.05.2020 to 31.05.2020
15	Online FDP on Introduction to fuzzy sets and its Generalization	Mepco Schlenk Engineering College, Sivakasi	10.06.2020
16	E-Quiz on Mathematics	Rohini College of Engineering & Technology	03.06.2020
17	Webinar on Fuzzy logic and its Applications	Rohini College of Engineering & Technology	12.06.2020
18	One day webinar on Residue Theory and its Applications	G .Venkataswamy Naidu College, Kovilpatti	12.06.2020
19	Webinar on fourth state of matter and its Applications	G. Venkataswamy Naidu College, Kovilpatti	15.06.2020
20	Webinar on Polynomials associated with Graph	Tirunelveli Dakshina Maranadarsangam College	15.06.2020
21	E-Quiz on Astropics	Madonna Arts & Science College for Women, Madurai	15.06.2020
22	Webinar on Graph embedding	Don Bosco College of Arts and science	16.06.2020

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	Pope's college (Autonomous), Sawyerpuram	18.06.2020
26	National Webinar on Mathematical Analysis and Topology	G. Venkataswamy Naidu College, Kovilpatti	20.06.2020
27	A Three Days National Level Webinar on Recent Trends in Graph Theory	Government Arts College, Paramakudi	22.06.2020-24.06.2020
28	Online Quiz on Basic linear Algebra	VHN Senthilkumara Nadar College	02.07.2020
29	International e-Quiz on Global Mathematicians	Forum De Mathematicians, Tamil Nadu, India	03.07.2020
30	Online test on Quantitative Aptitude for Placements and Competitive Examinations	Yadava College, Madurai	04.07.2020
31	Online NSS - Quiz (2020)	Umamaheswaranar Karanthai Arts College, Thanjavur	05.07.2020
32	National E Quiz on Genius of Mathematics	Mangayarkarasi College of Arts and Science for Women	08.07.2020
33	Online Quizophile 2020 Competition	EGS Pillay Group of Institutions, Nagapattinam	09.07.2020
34	Webinar on Soft Competing By Soft Sets	Don Bosco College of Arts and Science	10.07.2020
35	Recent Trends in Theoretical and Computational Mathematics (Virtual Mode)	PSGR Krishnammal College	24.02.2022 & 25.02.2022
36	Workshop on "NIRF Indian Ranking - 2023"	Madurai Kamaraj University	30.12.2022
37	Workshop on "NIRF Indian Ranking - 2024"	Madurai Kamaraj University	9.10.2023



**Workshop/Conference/FDP Attended in MTNC:**

<b>S. No.</b>	<b>Title of the FDP/ Workshop / conference</b>	<b>Name of the Institution/University</b>	<b>DD/MM/YYYY</b>
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 NET Examination 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, Learning and 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 setting up incubation centers	MTNC	22 .01.2019
10	Faculty Development Programme on Promotion of API and CAS Filing	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 building programme on outcome-based education	MTNC	28 .08.2019
14	One day workshop on Research writing and publication: Theory and 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 Score and 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 Contemporary 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.O 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
32	Technical Workshop on “Intellectual Property Rights”	MTNC	16.10.2023 & 18.10.2023

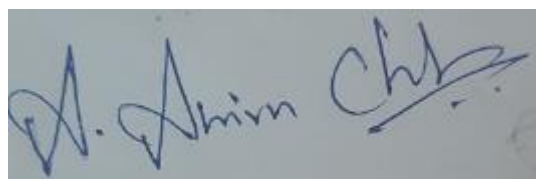
### Number of Conferences, Seminars, Workshops and other Programmes Organized:

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

### 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



Signature of the Faculty  
(Affix Scanned Copy of Signature)

