

Profile



Personal Information:

Name: Dr.R.BHAVANI

Designation: Associate Professor of
Mathematics

Department: Mathematics

E-Mail ID: bhavani120475@gmail.com

Contact No: 9942036132

I. Academic Qualifications:

Doctoral Research Ph.D

- **University:** Madurai Kamaraj University, Madurai, India
- **Title:** A Study on New Generalized closed sets in Bitopological Spaces
- **Year:** 2017

Master of Philosophy

- **University:** Madurai Kamaraj University, Madurai, India
- **Degree:** Master of Philosophy in Mathematics
- **Year:** 1999

Post-Graduation

- **University:** Madurai Kamaraj University, Madurai, India
- **Degree:** Master of Science in Mathematics
- **Year:** 1998

Under Graduation:

- **University:** Madurai Kamaraj University, Madurai, India
- **Degree:** Bachelor of Science in Mathematics
- **Year:** 1996

II. Teaching Experience:

Work Experience:

- **Under-Graduate:** 17 years
- **Post Graduate:** 17 years
- 2004-2006 Worked as a Lecturer in Mannar Thirumalai Naicker College (SF), Madurai.
- From 2006 – Working as an Assistant Professor in the Regular Stream in Mannar Thirumalai Naicker College, Madurai

III. Area of Specialization:

- Study of Bitopological Spaces
- Study of General Topology

IV. Orientation / Refresher Courses / Faculty Development Programme/Short Term Courses Attended:

Orientation Course:

- . UGC Sponsored Orientation Programme at Madurai Kamaraj University, Madurai 10th June 2008

Refresher Course:

- . UGC Sponsored Refresher Course on the theme of Advanced Analysis and its Applications at Madurai Kamaraj University, Madurai 27th February 2012
- . UGC Sponsored Refresher Course on the theme of Recent Trends in Mathematics at Madurai Kamaraj University, Madurai February 2014
- . UGC, HRDC, Andhra University, Visakhapatnam Inter Disciplinary-Environmental Sciences, 26.08.2021 to 8.09.2021
- . UGC, HRDC, UNIVERSITY OF ALLAHABAD , 02.11.22 to 15.11.22

Faculty Development Programme:

- . Faculty Development programme on Pedagogy and Research Methods from 24-05-2021 to 06-06-2021 at Human Resource Development Center and Internal Quality Assurance Cell

- Faculty Development programme on Prominance of Mathematics in Diverse Sectors, Hindusthan College of Engineering and Technology, 15.07.2020
- Faculty Development programme on IQAC, Madurai Kamaraj University, Quality Assurance and Sustenance in Higher Education, 11.03.2020
- Faculty Development programme on IQAC, Madurai Kamaraj University, Promotion of API Score and CAS, 03.03.2020
- Faculty Development programme on IQAC, Madurai Kamaraj University, One day Training and Production Workshop on prospects of Outcome Based Curriculum, 09.03.2019
- Faculty Development programme on Madurai Kamaraj University, Promotion of API Score and CAS Filing, 02.03.2019
- Faculty Development programme on Madurai Kamaraj University, Intellectual Property Rights, Skill Development Programme, Innovations, Patents and Setting up Incubation Centers, 22.01.2019.
- Faculty Development programme on the theme of Emerging Trends in General Topology at Nadar Saraswathi College of Arts and Science, January 2014.

V. Books/Chapters Published in edited Volumes:

- Recent Trends in Mathematical Models published by Shanlax Publications ,(ISBN No: 978-93-80686-97-4)

VI. Papers Published in UGC Notified Journals:

- On Weak Forms of $(1,2)^*$ - γ -open Sets and Some New Separation Axioms, Indian Journal of Natural Sciences, Vol15, Issue-84, Jun 2024
- Further Studies on Continuity of γ^* grw Closed Set with Grill, Indian Journal of Natural Sciences, Vol15, Issue-83, April 2024
- On Some Properties of Micro- Λ_{Λ_m} -Sets in Micro Topological Spaces, Indian Journal of Natural Sciences, Vol14, Issue-81, Dec 2023
- Applications of optimal Nutrient Content and Nutritional Security of Millets using Micro Topological Spaces, Pramana Research Journal, Vol 13, Issue 3, March 2023
- On Continuity of γ^* GRWC Sets, Indian Journal of Natural Sciences, Vol14, Issue-80, Oct 2023
- Micro \wedge - Generalized Closed sets and Properties of Micro \wedge sets in Micro Topological Spaces, Indian Journal of Natural Sciences, Vol14, Issue-77, April 2023
- Micro $-I -\alpha$ - open sets and Micro $-I -\alpha$ Continuous function in Micro Topological Spaces, Indian Journal of Natural Sciences, Vol 13, Issue 76, Feb 2023
- Design and Evaluation of the Traffic signal light Control to Reduce the Vehicle Waiting Time, YMER, Vol21, Oct 2022
- MIC $-\alpha I_g$ and MIC $-I_g \alpha$ Closed sets in Micro ideal Topological Spaces, Indian Journal of Natural Sciences Vol13, Issue 75 Dec 2022

- On MIC- α g Continuous and MIC α g – Irresolute Mapping in Micro Ideal Topological Spaces, Gis Science, Vol 9, Issue 12, Pg No: 1788-1798, Dec 2022
- An Application of Micro Topological Spaces with Decision Making Problem in Dengue Fever, YMER, Vol 21, Issue 12, pg no: 1790-1805, Dec 2022.
- An Application of Micro Topological Spaces with Decision Making Problem in Medical Events, YMER, Vol 21, Issue 11, pg no: 1790-1805, Nov 2022.
- On Micro- I^*g – closed sets in micro ideal topological spaces. International Journal of Health Sciences, 6(S4), 2669–2674, (2022).
- On Nano Ω – Closed Sets, Journal of Xidian University ISSN No: 1001-2400
- On Strong Forms of Generalized Closed Sets In Micro Topological Spaces, Turkish Journal of Computer and Mathematics Education, Vol. 12, No: 11 (2021), 2772-2777
- On The Classes $(1,2)$ - β_c -Open Sets in Bitopological Spaces in International Journal of Mathematics Trends and Technology (IJMTT) in 2020 Volume 66 Issue 2 ISSN No: 2231-5373.
- Some properties of Nano $g(1,2)^*$ -closed sets in IJST in 2019
- On Some Classes of Nano $(1,2)^*g$ -closed sets in Bitopological Spaces in IJRT in 2018 Volume 5 with Impact factor 5.417 ISSN No: 2231-9637

- On Nano αg^{\wedge} – closed sets in International Journal of Applied Mathematics in 2017 Volume 5 ISSN No: 1314-8060
- Properties of Nano αg^{\wedge} - closed sets in Journal of Global Research in Mathematical Archives in 2017 Volume 5 ,Issue 2, ISSN No : 2320-5822
- On $g_{\sim}(1,2)^*$ - closed sets in International Journal of Mathematics and its applications Page Number (65-73) in 2015 Volume 3, ISSN No : 2347-1557

VII. Papers Presented in Seminars/Conferences :

- $g(1,2)^*$ - open maps in Bitopological spaces State Level in Resent Trends in Mathematical Models at Mannar Thirumalai Naicker College 14th August 2014
- $T(1,2)^*$ -in Bitopological spaces National Level in Resent Trends in Applied Mathematics at Mannar Thirumalai Naicker College 14th August 2015
- Women Empowerment – Milestones and Challenges International Level Women’s Cell at N.M.S.S. Vellaichamy Nadar College 8th October 2015
- Some properties of Nano $g(1,2)^*$ -closed sets International Level, AMST 25th July 2019
- An Application of Micro Topological and Decision making problems in Medical Events, IEEE International E - Conference on Emerging Technologies

and Applications for a Smart and Sustainable World”, 16.12.2021 – 18.12.2021.

- A New Approach of $(1,2)^*$ - Semi Open Set in Bitopological Spaces IEEE International E - Conference on Emerging Technologies and Applications for a Smart and Sustainable World”, 16.12.2021 – 18.12.2021.
- On weak forms of $(1,2)^*$ Γ open sets and some new separation axioms, International Conference on Exploration of Contemporary Mathematical Sciences - 2022, 17.03.2022 & 18.03.2022.
- An application of Micro topological Spaces with decision making problem in dengue fever, International Conference on Exploration of Contemporary Mathematical Sciences -2022, 17.03.2022 & 18.03.2022.
- Micro - I - α - open sets and Micro I - α - continuous functions in Micro Ideal topological spaces, National Conference on Present Scenerio in Mathematical Research, 22.04.2022.
- New approach of Micro - \wedge - Generalised closed sets in micro topological spaces, National Conference on Present Scenerio in Mathematical Research, 22.04.2022.

- On Micro I_g^* - Closed sets in Micro Ideal Topological Spaces, International Conference on Analysis and Applied Mathematics, 26.04.2022 – 28.04.2022.
- γ^* grws sets with grill ,Recent Development and Techneques in Pure and Applied Mathematics, Alagappa University, 23.03.23& 24.03.23
- Micro - \wedge - Generalised continuous function in micro Topological spaces,International Conference on Emerging Trends in Computational Mathematics and Data Science,Sri Krishna Arts and Science College, Coimbatore,January 10&11,2024
- On MIC- β -I-Open Sets And MIC- β -I-Continuous in Micro Ideal Topological Spaces,National Conference On Recent Advancements In Pure And Applied Mathematics(RAPAM-2024),Mannar Thirumalai Naicker College,Madurai on 15th March 2024.

Proceedings

S. No	Date of the Conference / Seminar	Name of the Conference/ Seminar	Name of the Institution	Title of the Paper	ISBN No.	Month & Year of Publication
1	24 th & 25 th January 2023	International conference on Mathematical Analysis in Computational Biology and Data Science	PSGR Krishnammal College for Women, Coimbatore	Strong Forms of Closed sets in Micro Ideal Topological Spaces	ISBN : 978-81-960660-4-8	January 2023
2	21 st September 2023	National seminar on Recent Trends in Pure and Applied Mathematics	Aditanar College of Arts and Science	More Functions on Micro topological spaces	ISBN:978-81-965805-3-7	September 2023
3	10-11 January 2024	International Conference on Emerging Trends in Computational	Sri Krishna Arts and Science College	Micro \wedge Generalised continuous function in	ISBN: 978-81-966558-08	January 2024

		Mathematics and Data Science		micro Topological spaces		
4	21.07.2023 to 23.07.2023	11 th World Tamil Research International Conference	World Tamil Research Institution	Contribution of mathematics in tamil literature	ISBN:978-81-953243-2-3	July 2023

VIII. Details of Projects :

S.No	ProjectTitle	Name of Applicant(s)	Status	Amount	Agency	Year
1	A Study On \tilde{g} (1, 2) Closed Set & \tilde{g} (1, 2)-Open Maps In Bitopological Spaces	Dr.R.BHAVANI	Submitted	3,00,000	UGC	August 2015
2	(1,2)* ω - Continuity And Its Decompositions	Dr.R.BHAVANI	Submitted	5,00,000	NBHM	July 2016
3	A study on \tilde{g} (1, 2)*- locally closed sets in Bitopological spaces	Dr.R.BHAVANI	Submitted	2,90,000	Management Fund, Mannar Thirumalai Naicker College	June 2017
4	A study on Nano Topological Spaces on Nano Closed Sets	Dr.R.BHAVANI	Submitted	3,00,000	Management Fund, Mannar Thirumalai Naicker College	July 2018

Details of Seed Money received from the institution for institutional sponsored Faculty /

Interdepartmental / Students Project :2

Name of Principal Investigator / Co Investigator	Faculty / Interdepartmental / Students Project	Title of the research project	Amount / Fund received	Year of sanction	Duration
Dr.R.Bhavani	Students Project	“An Application Of Micro Topological Spaces With Decision Making Problem In Medical Events”	10000	Sep 2021	1 year
Dr.R.Bhavani	Students Project	“Investigate Optimal Nutrient	12500	Oct 2022	1 year

		Content And Nutritional Security of Millets using Micro Topological Spaces”			
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IX. Faculty Development Programme/ Conference Seminar Attended:

- State Level Seminar on Vistas in Mathematics at Sri S.R.N.M College 9th February 2013
- National Level Seminar on Applicable Mathematics and Mathematical Models at M .S .N .P Meenakshi Women’s College 28th December 2013
- State Level Seminar Emerging Trends in General to Topology at N.S. College of Arts and Science 24th January 2014
- National Level Seminar on Applications in Fuzzy Mathematics and Fractal Geometry at The American College 21st February 2014
- National Level Seminar on Women Empowerment – Milestones and Challenges at S.V.N College 08th October 2015
- International Level Seminar on Women are the Architects of Society K.L.N College 05th March 2016
- National Level Seminar on Recent Advances in Pure and Applied Mathematics at Arul Anandar College 13th February 2017.

- . International National Level Seminar on Research Process Engineering Effective and For Quantitative Research at G.T.N College 28th February 2017
- . National Level Webinar on Stay At Home , Save lives Pledge at Ministry of Electronics and Information Technology 30th March 2020
- . National Level Webinar on Safety Against Covid 19 Certificate of Commitment 30th March 2020
- . National Level E Quiz on Covid 19 Pandemic General Awareness at Chandigarh Group of College 10th April 2020
- . National Level E Quiz on Impact of Covid 19 in Global Economy at Khadir Mohideen College 11th May 2020
- . National Level Seminar on Online Mathematics Quiz on Linear equation in One Variable at S.P.S.P.M Junior College 22nd May 2020
- . National Level Seminar E Quiz on Numerical Methods at Government College for Women 23rd May 2020
- . National Level Seminar on E Quiz by Department of Mathematics at Sengunthar Arts and Science College 26th May 2020
- . National Level Webinar on Qualitative Analysis of Differential Equations and its Applications at G.T.N Arts College 27th May 2020

- National Level Webinar on Recent Research Directions in Distance in Graphs at Ayya Nadar Janki Ammal College 28th May 2020
- National Level Webinar on Fuzzy Logics and its Application at SRM TRP Engineering College 29th May 2020
- National Level E Quiz on Pure Mathematics Vel Tech High Tech June 2020
- International National Level Webinar on Graph Theory and Human Factors in Aviation at G.Venkataswamy Naidu College From 3rd June to 05th June 2020
- National Level Online FDP on Introduction to fuzzy sets and its Generalization at Mepco Schlenk Engineering College 10th June 2020
- National Level Webinar on Polynomials associated with Graphs at Tirunelveli Dakshina Mara Nadarsangam College 15th June 2020
- International Webinar on fourth State of matter and its Application at G.Venkataswamy Naidu College 15th June 2020
- National Level Webinar on Graph Embedding at Don Bosco College of Arts and Science 15th June 2020
- National Level E Quiz on Investment Management at Saraswathi Narayanan College 17th June 2020

- National Level Webinar on Edge Colouring in Graphs at Popes College (Autonomus) 18th June 2020
- National Level E Quiz Program on Economic Policies of Asia-Pacific Nations against the impact of Covid 19 Pandemic at Saraswathi Narayanan College 18th June 2020
- National Level Webinar on statistics and Data Analysis at KPR Institute of Engineering and Technology 19th June 2020
- National Level Webinar on Some New Direction in Graph Theory at S.T. Hindu College 19th June 2020
- National Level Online Quiz on General Awareness at Tirunelveli Dakshina Mara Nadarsangam College 19th June 2020
- National Level Webinar on Mind Set Management at The Standard Fireworks Rajaratnam College For Women 20th June 2020
- National Level Webinar on Mathematical Analysis And Topology at G.Venkataswamy Naidu College 20th June 2020
- National Level Webinar on Recent Trends in Graph Theory at Government Arts College from 22nd June 2020 to 24th June 2020
- National Level English On line Quiz at Adhiparasakthi College of Engineering from 24th June 2020 to 30th June 2020

- National Level E Quiz on Maths GK at Trinity College for Women 26th June 2020
- National Level E Quiz on Maths in Data Science at Arul Anandar College from 26th June 2020 to 30th June 2020
- International Level Webinar on Fractional system with Rossenblatt Process and Poison Jumps – Optimal at KPR Institute of Engineering and Technology 27th June 2020
- National Level E Quiz on Mathematics at Thavaturu Santhalinga Adigalar Arts and Science College 28th June 2020
- National Level Webinar on Recent Trends in Mathematics at Indian Institute of Technology 29th June 2020
- National Level E Quiz on Mathematical Statistics at Saraswathi Narayanan College from 1st July 2020 to 4th July 2020
- National Level Webinar on Optimal Control of Partial Differential Equations and Application at Indian Institute of Technology 3rd July 2020
- National Level Webinar on Mind Archives What it Conceives at G.T.N Arts College 4th July 2020
- National Level Webinar on Ungal Kanavu Maipada at SFR College 6th July 2020

- National Level E Quiz on Basic Linear Algebra at Virudhunagar Hindu Nadar's Sethukumara Nadar College(Autonomus) 6th July 2020
- National Level E Quiz on Genius of Mathematics at Mangayarkarasi College of Arts and Science 8th July 2020
- National Level Webinar on Soft Computing By Soft Sets at Don Bosco College of Arts and Science 10th July 2020
- International Webinar on Resents Trends in Mathematics at Government Arts College from 10th July 2020 to 11th July 2020
- National Level Webinar on Object Recognition Yolo/Mobile Net/Cloud at Khalsa College for Women 10th July 2020
- National Level Webinar on Creative Digital Testing Materials at Tamil Nadu Teachers Education University 11th July 2020
- National Level Webinar on Online Test For Effective Virtual Teaching and Learning at Stella Matutina College of Education 11th July 2020
- National Level Webinar Series on Application of Mathematics at KPR Institute of Engineering and Technology from 6th July 2020 to 11th July 2020
- National Level E Quiz on Quantitative Aptitude (Problems on Ages) For Placements And Competitive Exams at Yadava College 13th July 2020

- . National Level Webinar Knowledge Series on Horizons in Research at Tamil Nadu Teachers Education University from 13th July 2020 to 17th July 2020
- . International FDP on Prominence of Mathematics in Diverse Sectors at Hindustan College of Engineering and Technology 15th July 2020
- . National Level Webinar on Teacher of the Day You too are Sculptors at Cholan College of Education 18th July 2020
- . International webinar, Data Science in e-Commerce, 23.07.2021
- . National Webinar, A Seven Day Online Faculty Development Programme on Enhancing Quality by unearthing Innovative Practices-EQUIP 2022, 18/04/2022 to 24/04/2022
- . Faculty Enhancement Programme on Education 4.0 for Sustainable Economic Development, 27.04.2022
- . An Application of Micro Topological and Decision making problems Technologies and Applications for a Smart and Sustainable World”, 16.12.2021-18.12.2021.

- A New Approach of $(1,2)^*$ - Semi Open Set in Bitopological Spaces IEEE International E - Conference on Emerging Technologies and Applications for a Smart and Sustainable World”, 16.12.2021-18.12.2021.
- On weak forms of $(1,2)^*$ Γ open sets and some new Separation axioms, International Conference on Exploration of Contemporary Mathematical Sciences – 2022, 17.03.2022 & 18.03.2022.
- An application of Micro topological Spaces with decision Making problem in dengue fever, International Conference on Exploration of Contemporary Mathematical Sciences -2022, 17.03.2022 & 18.03.2022.
- Micro – I – α – open sets and Micro I – α – continuous functions in Micro Ideal topological spaces, National Conference on Present Scenerio in Mathematical Research, 22.04.2022.

.New approach of Micro - \wedge - Generalised closed sets in Micro topological spaces, National Conference on Present Scenerio in Mathematical Research, 22.04.2022.

.On Micro I_g^* - Closed sets in Micro Ideal Topological Spaces,International Conference on Analysis and Applied Mathematics,26.04.2022 – 28.04.2022.

. Recent Development and Techneques in Pure and Applied Mathematics, Alagappa University , Karaikudi, 23.03.23&24.03.23

.International Conference on Emerging Trends in Computational Mathematics and Data Science,Sri Krishna Arts and Science College,Coimbatore,January 10&11,2024

X. Academic Responsibilities (MTNC):

S.No	Name of position	From	To
1	N.S.S Programme Officer	2007	2010
2	ECO Club (convenor)	2010	2015
3	Soft Skill Development Programme Convenor	2014	2015

4	Women's Development Cell Convenor	2015	2016
5	Women's Hostel Warden	2016	2019
6	Calendar Committee Convenor	2018	2022
7	Women's Development Cell Convenor	2019	2022
8	Autonomy Committee Co- Convenor	2020	2022
9	Research guidance	2021 to Till Date	-
10	Criterion-III-Convenor	2023	-
10	Science Dean	Till Date	-

XI. Faculty Development Programme/Conference Seminar Attended in MTNC:

- . National Level Faculty Development Programme on 4th March 2017
- . National Level Webinar on Online Teaching ,Learning and Assessment from 23rd October 2017 to 24th October 2017
- . National Level e-Content Development and Digital Tools from 2nd March 2018 to 3rd March 2018
- . National Level IPR Skill Development Programmes 22nd January 2019
- . National Level E Workshop Cum E Quiz on Positive Thoughts and Ideal Life 28th May 2020

- . National Level E Quiz on Library and Information Science Life 29th May 2020
- . National Level E Quiz on Palam Tamil Illakkiyam 30th May 2020
- . National Level E Quiz For NET / SET Preparation in Physical Education 31st May 2020
- . National Level E Quiz on Fundamental Physics 1st June 2020
- . International Webinar, Data Science in e- Commerce, International webinar, International Webinar, 23.07.2021
- . National Webinar , A Seven Day Online Faculty Development Programme on Enhancing Quality by unearthing Innovative Practices-EQUIP 2022, 18/04/2022 to 24/04/2022
- . Faculty Enhancement Programme on Education 4.0 for Sustainable Economic Development, 27.04.2022
- . On weak forms of $(1,2)^* \Gamma$ open sets and some new Separation axioms, International Conference on Exploration of Contemporary Mathematical Sciences – 2022, 17.03.2022 & 18.03.2022.
- . An application of Micro topological Spaces with decision

Making problem in dengue fever, International Conference on Exploration of Contemporary Mathematical Sciences -2022, 17.03.2022 &18.03.2022.

.Micro – I – α – open sets and Micro I – α – continuous functions in Micro Ideal topological spaces, National Conference on Present Scenerio in Mathematical Research, 22.04.2022.

.New approach of Micro - \wedge - Generalised closed sets in Micro topological spaces, National Conference on Present Scenerio in Mathematical Research, 22.04.2022.

. Faculty Enhancement Programme on Education 4.O for Sustainable Economic Development, Mannar Thirumalai Naicker College, Madurai, 27.04.2022.

. Faculty Research Programme on Dynamics of Research Publications, Mannar Thirumalai Naicker College, Madurai, 15.09.2022 &16.09.2022

. National Conference on Current Trends in Applied Mathematics &IPR, Mannar Thirumalai Naicker College, Madurai, 07.10.2022

- . Math Teachers Training Through Low Cost Teaching Aids, Mannar Thirumalai Naicker College, Madurai, 06.07.2022 to 08.07.2022
- . Insights of National Educational Policy, Mannar Thirumalai Naicker College, Madurai, 18.03.2023
- . On $MIC-\beta-I$ -Open Sets And $MIC-\beta-I$ -Continuous in Micro Ideal Topological Spaces, National Conference On Recent Advancements In Pure And Applied Mathematics (RAPAM-2024), Mannar Thirumalai Naicker College, Madurai on 15th March 2024



Signature of the Faculty
(Affix Scanned Copy of Signature)