



## Dr.V.Maheswari

Assistant Professor

PG & Research Department of Mathematics

A.P.C.Mahalaxmi College for Women, Thoothukudi

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**Date of Appointment** : 24 August, 2017

**Education** : M.Sc., M.Phil., SLET., Ph.D.,,

**Specialization** : Graph Theory, Decomposition of Graphs

## Education & Credentials

Degree	College / University	Specialization	Year
<b>Ph.D.</b>	Manonmaniam Sundaranar University, Tirunelveli	Decomposition of Graphs	2012
<b>M.Phil.</b>	Manonmaniam Sundaranar University, Tirunelveli	Random Packing of Graphs	2006
<b>SLET</b>	Bharathiar University, Coimbatore	Mathematics	2004
<b>M.Sc.</b>	V.O.Chidambaram College, Thoothukudi	Mathematics	2005
<b>B.Sc.</b>	A.P.C.Mahalaxmi College for Women, Thoothukudi	Mathematics	2003

## Research Guidance Offered

A) Research Experience : 11 years

B) Title of Thesis : Studies in Graph theory – “Decomposition of Graphs into  
Paths and Trees”

C) Research Scholars : 2 (Pursuing Ph.D.)

D) No.of Students (M.Phil. Level) Guided : 23 Students

### **Online Courses Completed**

1. Introduction to Biostatistics – Elite (2019)
2. Psychology of Everyday – Elite Silver (2019)

### **Orientation / Refresher Attended**

Participated in the UGC – Sponsored 122<sup>nd</sup> Orientation Programme at Bharathiar University, Coimbatore held from 13.02.2019 to 12.03.2019.

### **Faculty Development Programme**

1. Seminar on “The Role of Faculty in Institutional Development” at V.O. Chidambaram College, Thoothukudi on 17.08.2019.
2. Faculty Development Programme on Introduction to Biostatistics for completing online course from July to Sep. 2019.
3. Faculty Development Programme on Psychology of Everyday for completing online course from July to Aug. 2019.

### **Paper Publications**

1. **On Randomly F- Decomposable Graphs** in ActaCienciaIndica, Vol XXXIIIM, No. 2, 395(2007) (ISSN 0970 – 0455).
2. **Decomposition of product graphs into paths and cycles of uniform length** in International Journal of Applied Mathematics, Vol. 22, No.3 (2009), 419-433 (ISSN 1311-1728).
3. **Path Double Covering Number of Product Graphs** in International Journal of Mathematical Combinatorics, Vol. 2(2009), 27-38 (ISSN 1937-1055).
4. **Path numbers for product graphs** in Enrich, Vol. 1(1): 39-44, July-Dec., 2009 (ISSN 2319 – 6394).
5. **Graphoidal Tree d-cover for product graphs** in International Journal of Mathematical Sciences Vol. 9, No. 1-2 (2010), 239-248 (ISSN 0972 – 754X).

6. **Super edge magic labeling of some graphs** in Enrich, Vol-1(II)Jan-June 2010(34-44) (ISSN 2319 – 6394).
7. **Strong,weak domination number of a graph** in Enrich, Vol-1(II)Jan-Jun2010(45-56) (ISSN 2319 – 6394).
8. **Signed domination number** in Enrich, Vol-1(II)Jan-Jun2010(45-56) (ISSN 2319 – 6394).
9. **Decomposition of Symmetric Digraphs into Directed Paths** in Ultra Scientist of Physical Sciences, Vol. 23(1)M, 265-276 (2011) (ISSN 2231 – 346X).
10. **Distar Decompositions of a Symmetric Product Digraph** in Scientia Magna, Vol. 8 (2012) No. 4, 43-50 (ISSN 1556-6706).
11. **Ascending Graphoidal Tree Cover** in International Journal of Discrete Mathematical Sciences and Cryptography, Vol.16(2013),No.4&5,pp.283-295(ISSN 0972-0529) (UGC APPROVED).
12. **Graphoidal directed out-tree covering number of digraphs** in Outreach, Volume VI 2013,87-90.(ISSN 2321 8835).
13. **Product Cordial Labeling of Some Graphs** in Enrich, Vol.IV(II): 68-72, Jan – Jun 2013 (ISSN 2319 – 6394).
14. **Graphoidal path double covers** in International Journal of Discrete Mathematical Sciences and Cryptography, Vol.16(2013),No.4&5,pp.221-233 (ISSN 0972-0529) (UGC APPROVED).
15. **Ascending Graphoidal Tree Cover** in International Journal of Mathematical Archive,Vol. 7(8), 2016, 71 -75 (ISSN 2229-5046) (UGC APPROVED).
16. **Gd- Distance in graphs** in International Journal of Mathematical Archive, Vol.9(2), 2018, 220-224 (ISSN 2229-5046) (UGC APPROVED).
17. **“Ascending Tree Cover of Some Special Graphs”** in a International Journal of Science, Engineering and Management, Vol. 2, Issue 12, Dec 2017, 101-104(ISSN 2456 1304).

18.  **$g^*$ - $R_i$   $i=0,1$  spaces in Topological spaces** in Proceedings of National Conference on Innovations in Mathematics, Feb 09, 2018, 76-80.
19.  **$g^*$ -separation axioms in Topological spaces** in Proceedings of National Conference on Innovations in Mathematics, Feb 09, 2018, 81 – 86.
20. **Some Neighbourhood Prime Graphs** in Enrich, Vol IX(I): 32-38, July – Dec 2017(ISSN 2319 – 6394).
21. **Neighbourhood Prime labelling on some square Graphs** in Enrich, Vol IX(II), Jan – Jun 2018 (ISSN 2319 – 6394).
22. **Strongly  $g^*$ - closed sets in topological spaces** in International Journal of Recent Research Aspects, April 2018, pp. 577-579((ISSN 2349-7688) (UGC APPROVED)).
23.  **$\hat{g}s^*$ - continuous maps in topological spaces** in Proceedings of National Seminar on New Dimensions in Mathematics and its applications, 74 – 83, October 2018.
24.  **$SB\hat{g}$ - $R_0$  space and  $SB\hat{g}$ - $R_1$  space** in Proceedings of National Seminar on New Dimensions in Mathematics and its applications, 22-29, October 2018.
25. **Some new  $b^*g^*$ -continuous functions in Topological Spaces** in International Journal of Emerging Technologies and Innovative Research, February 2019, Volume 6, Issue 2, 757-761 (ISSN 2349-5162) (UGC APPROVED).
26. **Application on  $bg^*$ -closed sets in Topological Spaces** in International Journal of Emerging Technologies and Innovative Research, February 2019, Volume 6, Issue 2, 832 - 836 (ISSN 2349-5162) (UGC APPROVED).
27. **Even Decomposition of Graphs** in International Journal of Emerging Technologies and Innovative Research, February 2019, Volume 6, Issue 2, 107-115 (ISSN 2349-5162) (UGC APPROVED).
28. **Product on Anti Fuzzy Graphs** in in International Journal of Emerging Technologies and Innovative Research, February 2019, Volume 6, Issue 2, 123-128 (ISSN 2349-5162) (UGC APPROVED).

29. **On Mean-Anti Magic Labeling of Graphs** in International Journal of Emerging Technologies and Innovative Research, February 2019, Volume 6, Issue 2, 129-134 (ISSN 2349-5162) (UGC APPROVED).
30. **Some New Separation Axioms in Topological Spaces** in International Journal of Emerging Technologies and Innovative Research, February 2019, Volume 6, Issue 2, 336-341 (ISSN 2349-5162) (UGC APPROVED).
31. **On Some Neighbourhood Prime Labeling of Graphs** in International Journal of Emerging Technologies and Innovative Research, February 2019, Volume 6, Issue 2, 1252-1257 (ISSN 2349-5162) (UGC APPROVED).
32. **3- Graphoidal Path Covers** in International Journal of Emerging Technologies and Innovative Research, February 2019, Volume 6, Issue 2, 940-945 (ISSN 2349-5162) (UGC APPROVED).
33. **2-Graphoidal Path Cover of Some Special Graphs** in International Journal of Emerging Technologies and Innovative Research, February 2019, Volume 6, Issue 2, 1115-1123 (ISSN 2349-5162) (UGC APPROVED).
34.  **$\rho$ - $T_0$  and  $\rho$ - $T_1$ -spaces in Topological Spaces** in International Journal of Emerging Technologies and Innovative Research, February 2019, Volume 6, Issue 2, 731-735 (ISSN 2349-5162) (UGC APPROVED).
35. **The Strong Product on Anti Fuzzy Graphs** in Proceedings of International conference on Graph Theory and its Applications, pp 24-30, April 2019 (ISBN 978-81-938054-7-3).
36. **Sum Cordial Zero Divisor Graphs** in Proceedings of International conference on Graph Theory and its Applications, pp 47-52, April 2019 (ISBN 978-81-938054-7-3).
37. **Some Results on Cube Divisor Cordial Labeling of Graphs** in Proceedings of International conference on Graph Theory and its Applications, pp 41-46, April 2019 (ISBN 978-81-938054-7-3).

## **Papers Presented in Conferences / Seminars**

### **International Level**

1. **Ascending tree Cover of some special Graphs** in a International conference on Recent Advancements in information Technology, Science & Engineering at A.P.C.Mahalaxmi College for Women, Thoothukudi on 14.12.2017 to 15.12.2017.
2. **Strongly  $g^*$ - closed sets in topological spaces** in a International Conference on Recent Trends in Multi-Disciplinary Research at V.O.Chidambaram College, Thoothukudi on 19.04.2018 to 20.04.2018.
3. **Some new  $b^*g$ -continuous functions in Topological Spaces** in a International Conference on Recent Trends in Multi-Disciplinary Research at A.P.C.Mahalaxmi College for Women, Thoothukudi on 20.12.2018 to 21.12.2018.
4. **Application on  $bg$ -closed sets in Topological Spaces** in a International Conference on Recent Trends in Multi-Disciplinary Research at A.P.C.Mahalaxmi College for Women, Thoothukudi on 20.12.2018 to 21.12.2018.
5. **Even Decomposition of Graphs** in a International Conference on Recent Trends in Multi-Disciplinary Research at A.P.C.Mahalaxmi College for Women, Thoothukudi on 20.12.2018 to 21.12.2018.
6. **Product on Anti Fuzzy Graphs** in a International Conference on Recent Trends in Multi-Disciplinary Research at A.P.C.Mahalaxmi College for Women, Thoothukudi on 20.12.2018 to 21.12.2018.
7. **On Mean-Anti Magic Labeling of Graphs** in a International Conference on Recent Trends in Multi-Disciplinary Research at A.P.C.Mahalaxmi College for Women, Thoothukudi on 20.12.2018 to 21.12.2018.
8. **Some New Separation Axioms in Topological Spaces** in a International Conference on Recent Trends in Multi-Disciplinary Research at A.P.C.Mahalaxmi College for Women, Thoothukudi on 20.12.2018 to 21.12.2018.
9. **On Some Neighbourhood Prime Labeling of Graphs** in a International Conference on Recent Trends in Multi-Disciplinary Research at A.P.C.Mahalaxmi College for Women, Thoothukudi on 20.12.2018 to 21.12.2018.

10. **3- Graphoidal Path Covers** in a International Conference on Recent Trends in Multi-Disciplinary Research at A.P.C.Mahalaxmi College for Women, Thoothukudi on 20.12.2018 to 21.12.2018.
11. **2-Graphoidal Path Cover of Some Special Graphs** in a International Conference on Recent Trends in Multi-Disciplinary Research at A.P.C.Mahalaxmi College for Women, Thoothukudi on 20.12.2018 to 21.12.2018.
12.  **$\rho$ - $T_0$  and  $\rho$ - $T_1$ -spaces in Topological Spaces** in a International Conference on Recent Trends in Multi-Disciplinary Research at A.P.C.Mahalaxmi College for Women, Thoothukudi on 20.12.2018 to 21.12.2018.
13. **On Total Neighbourhood Prime Labeling of Special Graphs** in a State level Seminar on Graph Theory and Vedic Mathematics at Kamaraj College, Thoothukudi on 27.09.2019.

## National Level

1. **Decomposition of Product Graphs into Paths and Cycles of Uniform Length** in a National Conference on Algebra, Graph theory and their applications at M.S.University, Tirunelveli on 05.12.2007 to 07.12.2007.
2. **On Randomly F-Decomposable Graphs** in a Tenth TamilNadu National Science Congress at M.S. University, Tirunelveli on 21.05.2010 to 23.05.2010.
3. **Distar Decompositions of a Symmetric Product Digraph** in a National Conference on frontiers of pure& applied Mathematics at The M.D.T.Hindu College, Tirunelveli on 21.03.2012 to 22.03.2012.
4. **Ascending Graphoidal Cover of a Graph** in a National seminar on Topology and its applications in various fields at Seethalakshmi Ramaswami College, Trichy on 09.02.2017 to 10.02.2017.
5.  **$g^*-R_{i=0,1}$  spaces in Topological spaces** in National Conference on Innovations in Mathematics at Sadakathullah Appa College (Autonomous), Tirunelveli on 09.02.2018
6.  **$g^*$ -separation axioms in Topological spaces** in National Conference on Innovations in Mathematics at Sadakathullah Appa College (Autonomous), Tirunelveli on 09.02.2018

7. **Some Neighbourhood Prime Graphs** in National Conference on “Current Scenario in Pure and Applied Mathematics” at Sri Sarada College for Women, Tirunelveli on 20.02.2018.
8. **Neighbourhood Prime labelling on some square Graphs** in National Conference on “Current Scenario in Pure and Applied Mathematics” at Sri Sarada College for Women, Tirunelveli on 20.02.2018.
9.  **$SBg^{\wedge} - R_0$  Spaces &  $SBg^{\wedge} - R_1$  Spaces** in National Seminar on “New Dimensions in Mathematics and its Applications” at Kamaraj College, Thoothukudi on 17.10.2018.
10.  **$g^{\wedge}s^*$ - continuous maps in topological spaces** in National Seminar on “New Dimensions in Mathematics and its Applications” at Kamaraj College, Thoothukudi on 17.10.2018.

## **Conferences / Seminars / Workshops Attended**

### **International Level**

1. Fifth International Workshop on Graph Labelings in Kalasalingam University, Krishnankoil from 7<sup>th</sup> to 10<sup>th</sup> Jan. 2009.
2. Fifth Annual Instructional Conference of ADMA and Graph theory day V in Periyar University, Salem from 8<sup>th</sup> to 10<sup>th</sup> June 2009.
3. Conference on Recent Advancements in information Technology, Science & Engineering at A.P.C.Mahalaxmi College for Women, Thoothukudi from 14.12.2017 to 15.12.2017.
4. Conference on “Recent Trends in Multi – Disciplinary Research” at V.O.Chidambaram College from 19.04.2018 to 20.04.2018.
5. Conference on Recent Trends in Multi-Disciplinary Research at A.P.C.Mahalaxmi College for Women, Thoothukudi on 20.12.2018 to 21.12.2018.

### **National Level**

1. Mini Course on Algorithms and Data Structures at V.O.Chidambaram College, Thoothukudi on 28.09.2006 to 29.09.2006
2. National Conference on Algebra, Graph theory and their applications at M.S.University, Tirunelveli on 05.12.2007 to 07.12.2007.
3. Instructional Workshop on Algebraic Graph Theory at M.S.University, Tirunelveli on 17.03.2010 to 20.03.2010.



4. Tenth TamilNadu National Science Congress at M.S.University, Tirunelveli on 21.05.2010 to 23.05.2010.
5. National Conference on Recent Trends in Fuzzy Mathematics at Annamalai University on 14<sup>th</sup> and 15 Jun 2010.
6. Modern Trends in Pure and Applied Mathematics at Sri.Kalieswari College, Sivakasi on 17.09.2011.
7. Seminar on “Recent Trends in Mathematics” RTM – 2011at A.P.C.Mahalaxmi College for Women, Thoothukudi on 12.10.2011 & 13.10.2011.
8. National Conference on frontiersof pure& applied Mathematics at The M.D.T.Hindu College, Tirunelveli on 21.03.2012 and 22.03.2012.
9. Seminar on “Emerging Trends in Graph Theory and Fuzzy Mathematics” at A.P.C.Mahalaxmi College for Women, Thoothukudi on 06.09.2013.
10. Seminar on “Advances in Fuzzy Algebra, Fuzzy Topology and Fuzzy Graphs” at A.P.C.Mahalaxmi College for Women, Thoothukudi on 22.01.2015 & 23.01.2015.
11. Seminar on “LaTeX – Typesetting Tool” at National College, Trichy on 14.09.2015 & 15.09.2015.
12. A Short term course on “LaTeX-An Advanced Formatting Tool” at Srimad Andavan Arts and Science College, Trichy on 01.02.2017 to 04.02.2017.
13. Seminar on “Topology and its Applications in Various Fields” at Seethalakshmi Ramaswami College, Trichy on 09.02.2017 & 10.02.2017.
14. Conference on “Innovations in Mathematics” at Sadakathullah Appa College (Autonomous), Tirunelveli on 09.02.2018
15. Conference on “Current Scenario in Pure an Applied Mathematics” at Sri Sarada College for Women, Tirunelveli on 20.02.2018.
16. Workshop on Current Innovations & Development in Life Science at A.P.C.Mahalaxmi College for Women, Thoothukudi on 14.03.2018 & 15.03.2018.

## **State Level**

1. Seminar on Quality Improvement Programmes and Effective Functioning of Internal Quality Assurance Cell at V.O.Chidambaram College, Thoothukudi on 20.01.2006 to 21.01.2006

2. Seminar on Graph theory day and its applications at V.O.Chidambaram College, Thoothukudi on 10.08.09.
3. Workshop on Nurturing the Spirit of Research among Undergraduate Students at A.P.C.Mahalaxmi College for Women, Thoothukudi on 27.01.2011
4. Seminar on “Graph Theory and Topology” at V.O.Chidambaram College, Thoothukudi on 02.04.12.
5. Workshop on NET Training Programme at A.P.C.Mahalaxmi College for Women, Thoothukudi on 22.12.2017.
6. State level Seminar on Graph Theory and Vedic Mathematics at Kamaraj College, Thoothukudi on 27.09.2019.

## **Remarkable events**

1. Served as a Resource Person in a State Level Seminar on Graph Theory Day and its Applications on 10.08.2009.
2. Served as a Resource Person in a Workshop on R Programming for Statistics and Data Mining on 27.04.2017 and 28.04.2017.
3. Served as a Chair Person in a International Conference on Recent Trends in Multi-Disciplinary Research at A.P.C.Mahalaxmi College for Women, Thoothukudi on 20.12.2018 to 21.12.2018.

## **Participation in College Committees**

- Incharge of Ethics and Culture Club
- Incharge of APCM Academy
- Technical Committee Member of ENRICH Journal in 2017-2018