Name : **Dr. A. SUBRAMANIAN** 

Designation : Principal & Head

Date of Birth : 22-07-1962

Date of Appointment : 06-12-1989

Address : Department of Mathematics

The M.D.T. Hindu College, Tirunelveli – 627 010.

Phone : 0462-2534360

Mobile : 9443869494

Mail id : asmani1963@gmail.com

#### Award

Awarded University Level Best NSS Programme Officer by M.S. University for the year 2006.

# **Minor Research Project**

## (As a investigator of the following Minor Research Project)

Title of the Project: **Graphs and Topology** 

UGC Reference Number: F.MRP – 3361/10(UGC- SERO)

Link No: 3361

Period of Report: From 1st July 2010 to 31st March 2012.

Amount Sanctioned: Rs 70,000

## **Seminars/Conference organized**

- 1. Served as Organizing Secretary in the State Level Conference on "Higher Education and Students Participation in Quality Assurance" organized by the IQAC, The M.D.T Hindu College, Tirunelyeli on 24.01.2008 to 25.01.2008
- Served as an Organizing Secretary in the TANSCHE sponsored National Conference on 'Recent Trends in Analysis & Graph Theory' organized by the P.G. & Research Department of Mathematics, The M.D.T Hindu College, Tirunelveli on 11-08-2009 & 12-08-2009
- Served as an Organizing Secretary in the in the One day State Level Seminar on 'Functional Analysis &Topology' organized by the P.G. & Research Department of Mathematics, The M.D.T Hindu College, Tirunelveli on 22-10-2010.

- Served as an Organizing Secretary in the UGC sponsored "National Conference on Frontiers of Pure and Applied Mathematics" organized by the P.G. and Research Department of Mathematics, The M.D.T. Hindu College, Tirunelveli on 21-03-2012 & 21-03-2012.
- Served as Convener in the UGC sponsored Two-Day National Seminar on "Recent Developments in Functional Analysis, Topology and Graph Theory" organized by the P.G.
   Research Department of Mathematics, The M.D.T Hindu College, Tirunelveli on 26-03-2015 & 27-03-2015.

## Papers presented in the international/National Seminars/Conferences

- 1. 'Intersection Graph and Domination Sets: Its Domination Number' in the National Conference on Discrete Mathematics and its applications organized by M.S. University, Tirunelyeli from 05.01.2000 to 07.01.2000
- 2. 'Graphoidal Topology' in the U.G.C. Sponsored National Seminar on Applications of Mathematics organized by St. Joseph's College, Trichy from 17.02.2000 to 19.02.2000
- 'Queens Polynomials' in the State Level Conference on Mathematics in Computers organized by P.S.G. College of Arts and Science, Coimbatore from 21.03.2000 to 22.03.2000
- 4. 'Topological Gracefulness' in the The fifteenth Annual Conference of the Ramanujam Institute for Advanced Study in Mathematics organized by Ramanujan Institute, Chennai from 05.06.2000 to 07.06.2000
- 5. 'Difference labeling and Common weight Decomposition' in the International Conference on Recent Advances in Mathematical Sciences organized by the Department of Mathematics, IIT, Kharagpur from 20.12.2000 to 22.12.2000
- 'Self-morphic Graphs' in the U.G.C. Sponsored State Level Seminar on Discrete Mathematics organized by the Department of Mathematics, Pudukottai on 20.12.2001 & 21.12.2001

- 7. 'Topological Graphs' in the U.G.C. Sponsored National Seminar on Recent Developments in Mathematical Applications organized by the Department of Mathematics, Udumalpet on 01.02.2002 & 02.02.2002
- 'Effective preparation of Annual Quality Assurance Report' in the State Level Conference on 'Higher Education and Students Participation in Quality Assurance' organized by the P.G. and Research Department of Mathematics, The M.D.T. Hindu College, Tirunelveli on 24.01.2008 & 25.01.2008
- 9. 'Topological Difference labeling and Common weight Decomposition' in the International Conference on "Mathematics and Computer Science organized by the Department of Mathematics, Loyola College, Chennai from 05.01.2009 to 06.01.2009
- 10. 'Dom-strong domination and total dom strong domination in graphs' in the National Conference on "Recent Trends in Analysis and Graph Theory organized by the P.G. and Research Department of Mathematics, The M.D.T Hindu College, Tirunelveli on 11.08.2009 & 12.08.2009
- 11. 'Some results on e-excellent graph' in the State Level Seminar on 'Functional Analysis and Topology' organized by the P.G. & Research Department of Mathematics, The M.D.T. Hindu College, Tirunelveli on 22.10.2010
- 12. 'Skolem Difference Mean Labeling' in the 10<sup>th</sup> National Seminar on eyntamil Aayvazhar Mandram organized by the Ve.Pe.Su. Research Department of Tamil, The M.D.T. Hindu College, Tirunelveli on 11.12.2010
- 13. 'Perfect edge covering and perfect edge vertex domination sets in graph' in the National Seminar on 'Recent Developments in Functional Analysis, Topology and Graph Theory' organized by the P.G & Research Department of Mathematics, The M.D.T Hindu College, Tirunelyeli on 26-03-2015 & 27-03-2015
- 14. 'Perfect edge domination and perfect edge covering Domination sets in graphs in the National Seminar on "Recent Developments in Functional Analysis, Topology and Graph Theory" organized by the P.G & Research Department of Mathematics, The M.D.T Hindu College, Tirunelveli on 26-03-2015 & 27-03-2015

- 15. 'Adventures of Modern Teaching' in the National Conference on 'Modern Perspectives and Strategies in Teaching, Learning and Evaluation' organized by IQAC, The M.D.T Hindu College, Tirunelveli on 30-09-2016 & 01-10-2016
- 16. 'E-Learning and Hybrid Teaching' in the National Conference on 'Modern Perspectives and Strategies in Teaching, Learning and Evaluation' organized by IQAC, The M.D.T Hindu College, Tirunelveli on 30-09-2016 & 01-10-2016
- 17. 'Application of Perfect Domination in Logistics services using Web Service Composition' in the International Conference on Discrete and Computational Mathematics, ICDCM 2017 organized by the Department of Mathematics, The Gandhigram Rural Institute Deemed university, Gandhigram, Dindigul on 18.02.2017

## Papers published in the Journals (With ISSN)

- 1. 'Topology Graphs and Domination: A Step towards unification process' in Acta Ciencia Indica, Vol XXVII M, (2001), p163-166, ISSN 0253-732X.
- 2. 'Topologically Indexable Graphs' in Acta Ciencia Indica, Vol XXVII M, (2001), p155-162, ISSN 0253-732X.
- 3. 'Domination Number of Splitting Graph' in the Combinatorics, information and system sciences, Vol 26, (2001),p17-21, ISSN 0250-9628.
- 4. 'Neighbourhood Highly Irregular Graphs', in the Management and systems (IJOMAS), Vol 18, (2002), p227-231, ISSN 0970-7328
- 5. 'Skolem Mean labeling' in the Bulletin of Pure and Applied Sciences, (2007), p245-248, ISSN 0970-6577, Impact Factor 0.011
- 6. 'Some results on Skolem mean graphs' in the Bulletin of Pure and Applied Sciences, (2008), p67-74, ISSN 0970-6577, Impact Factor 0.011
- 7. 'Some results on Relaxed skolem mean graphs' in the Bulletin of Kerala Mathematics Association, (2009), p33-44, ISSN 0973-2721,
- 8. 'DSD-Irredundance in graphs' in the Pure and Applied Mathematika Sciences, (2009), p113-118, ISSN 0379-3168.
- 9. 'Complexity of double domination and Dom Strong Domination' in the Bulletin of Kerala Mathematics association, (2011), p187-193, ISSN-0973-2721

- 10. 'Skolem difference mean labeling of H-graphs' in the International Journal of Mathematics and Soft Computing, Vol.1, No.1, (August 2011), p115-129, Impact Factor 0.5714
- 11. 'Some fixed point theorems in M fuzzy metric space' in the International Journal of Mathematical Archive 2(11), (2011), p2205-2214, ISSN 2229-5046, Impact Factor 4.908
- 12. 'Maximal Vertex-Edge Dominations sets in Graphs' in the European Journal of Scientific Research 83(1), (2012), p91-94, ISSN 1450-216X
- 13. 'Some common fixed point theorems in M fuzzy metric space' in the International Journal of Mathematical Archive-3(3), (2012), p1005-1016, ISSN 2229-5046, Impact Factor 4.908
- 14. 'Common fixed point theorems for four mappings in M fuzzy metric space' in the International Journal of Mathematical Archive-3(3), (2012), p1039-1046, ISSN 2229-5046, Impact Factor –4.908
- 15. 'Common fixed point theorems for sequence of mappings in M fuzzy metric space' in the International Journal of Statistika and Mathematika, Vol.3, Issue 1, (2012), p16-26, ISSN 2249-8605,
- 16. 'Some Fixed Point Theorems for Multivalued mappings in D\*-Metric Spaces' in the International Journal of Mathematical Archive, Vol.3 (1), (2012), p270-284, ISSN 2229-5046, Impact Factor –4.908
- 17. 'Labeling of Sub divided graphs' American Journal of Mathematics and Sciences, Vol.1, No.1, (January June 2012), p143-149, ISSN 2250-3102, Impact Factor –0.927
- 18. 'Labeling of finite union of paths' in the International Journal of Mathematics and Soft Computing, Vol.02, Issue 1, (January 2012), p99-108, ISSN 2249-3328, Impact Factor 0.5714
- 19. 'Skolem difference mean graphs' in the Mapana Journal of Sciences, Vol.11, No.4, (October-December 2012), p109-120, ISSN 0975-3303
- 20. 'Sdm labeling of  $C_{2k+1} \otimes K_{1,m}$  and  $C_{2k} \otimes K_{1,m}$ ' in the AMO-Advanced Modeling and Optimization, Vol 15,No1, (2013),p113-120, ISSN 1841-4311

- 21. 'Strong Efficient Domination and Strong Independent Saturation Number of Graphs', in the International Journal of Mathematics and Soft Computing, Vol. 3, no. 2,(2013), p 41-48, ISSN: 2249-3328, Impact Factor 0.5714
- 22. 'Graphs in which upper strong efficient domination number equals the independence number' in the International Journal of Engineering Science and Invention, (2013), p32-37, ISSN 2319-6726, Impact Factor 1.786
- 23. 'Common fixed point theorems for multi-valued mappings in M fuzzy metric space' in the International Journal of Mathematical Sciences and Engineering Applications, Vol.7, No.IV, (2013), p187-204, ISSN 0973-9424, Impact Factor 0.5029
- 24. 'g\*p -closed sets in topological spaces' in International Journal of Mathematical Archive-4(1),(2013), p176-181 ISSN: 2229-5046, Impact Factor 4.908
- 25. 'On G\*P-continuous Maps in topological spaces' in International Journal of Modern Engineering Research (IJMER) Vol.3,Issue.1, Jan-Feb.2013 p-360-364 ISSN :2249-6645, Impact Factor –1.277
- 26. 'g\*p-locally closed sets and g\*p-locally closed functions' in Asian Journal of Current Engineering and Maths 2:2(March-April2013), p102-105, ISSN No:2277-4920
- 27. 'Applications of g\*p\*-closed sets in a topological spaces' in International J.of Math.Sci.& Engg.Appls.(IJMSEA) ISSN 0973- 9424,Vol.7 No.III (May,2013),p.215-222
- 28. 'On g\*p\* -continuous Maps in topological spaces' in Journal of Global Research in Mathematical Archieves, Volume 1,No.5, (May 2013) ISSN 2320-5822, Impact Factor 1.277
- 29. 'g\*p\*-Closed sets in topological spaces' in the International Journal of Mathematics and soft computing, Vol.3,No.3, (2013), p 55-60, ISSN 2249-3328, Impact Factor 5.120.
- 30. 'Strong Efficient Domination in Graphs' in the International journal of Innovative Science, Engineering & Technology, Vol. 1, No. 4, (2014), p172-177, ISSN 2348-7968, Impact Factor 5.264
- 31. 'E and V Magic strength of H-Multiple Labeling of Graphs' in the International Journal of Mathematical Archive 6(12), (2015), p47-56, ISSN 2229-5046

- 32. 'Connected Edge Geodetic Domination Number of a Graph' in the IOSR Journal of Mathematics (IOSR-JM) Vol 12, Issue 5 Ver VI, (Sep-Oct 2016), p50-53, e-ISSN 2278-5728
- 33. 'Edge Geodetic Domination Number of a Graph' in the International Journal of Mathematics and its Applications Vol 4, Issue 3–B, (2016), p45-50, ISSN 2318-0580
- 34. 'Upper Edge Geodetic Domination and Upper Connected Edge Geodetic Domination Number of a Graph' in the Bulletin of Mathematics and Statistics Research Vol.4, Issue 3, (July-Sept 2016), p116-122, ISSN 2318-0580
- 35. 'Radio Mean Square Labeling of Some Graphs' in the International Journal of Mathematics Trends and Technology (IJMIT) Vol 38 No. 2 Oct 2016, p35-41, ISSN 2231-5373
- 36. 'The Total Edge Geodetic Domination Number of a Graph' in the South East Asian J.of Math & Math.Sci. Vol 13, No.1, (2017), ISSN 0972-7752
- 37. 'Radio Mean Labeling of double triangular snake graph and quadrilateral snake graph' in the International Journal of Mathematical Archive-8(8), Aug 2017, p80-84, ISSN 2229-5046
- 38. 'Radio labelling of Hurdle graph and Biregular rooted Trees' in the IOSR Journal of Mathematics (IOSR-JM) Vol 13, Issue5 Ver.III, Sep-Oct 2017, p 37-44, e-ISSN 2278-5728

## Papers published in the Journals (With ISBN)

- 1. 'Graphoidal Topology' in the Proceedings of the National Seminar on Applications of Mathematics conducted by St, Joseph College, (2000), P51-52
- 2. 'Topological Difference labelling and topological common weight decomposition' in the Proceedings of the International Conference on Mathematics and Computer Science, Loyola College, )January 2009), p5-9, ISBN 978-81-8371-194-4
- 'Skolem Difference Mean labelling of Combs and Trees' in the Proceedings of the National Seminar on "Recent Developments in Pure and applied Mathematics", Standard fireworks, (13-09-2011), P1-5, ISBN 978-93-80368-13-9
- 'Skolem Difference Mean Labeling of finite union of bipartite graphs' in the Proceedings of the National Conference on Recent advancement in Science & humanities, (2011), P1-6, ISBN 978-81-920799-1-2

- 'Changing and unchanging GSE for vertex removal in graphs' in the proceedings of the International Conference on Applied Mathematics and Theoretical Computer Science sponsored by DRDO, DST, CSIR and IEEE(Madras section)and organized by St.Xavier's Catholic College of Engineering, Nagercoil on 24<sup>th</sup> and 25<sup>th</sup> January 2013. ISBN 978-93-82338-35-2.
- 6. 'Relationship among  $\sigma_{\text{sdm}}$ ,  $\gamma_{\text{sdm}}$  and  $\chi_{\text{sdm}}$  of some graphs from the path  $P_n$  in Advances in domination theory II, p33-44, (2013), ISBN 81-900205-6-0
- 7. 'Changing and unchanging strong efficient domination number for an edge removal / addition in graphs, in Advances in domination theory II, , (2013) p45-54, ISBN 81-00205-6-0
- 8. 'Perfect Edge domination and perfect edge covering domination sets in graphs' in the Proceedings of the UGC sponsored Two-Day 'National Seminar on Recent Developments in Functional Analysis, Topology and Graph Theory'-The M.D.T. Hindu College, (2015), p41-48, ISBN 978-81-931128-1-6
- 'Perfect edge covering and perfect edge vertex domination sets in graphs' in the Proceedings of the UGC sponsored Two-Day 'National Seminar on Recent Developments in Functional Analysis, Topology and Graph Theory'-The M.D.T. Hindu College, (2015), p49-53, ISBN 978-81-931128-1-6
- 10. 'Adventures of Modern Teaching' in the Proceedings of NAAC sponsored National Conference on Modern Perspectives and Strategies in Teaching, Learning and Evaluation, The M.D.T. Hindu College, 30.09.2016 and 01.10.2016, Published by HINDCO Publications ISBN 978-81-932645-2-2
- 11. 'E-Learning and Hybrid Teaching' in the Proceedings of NAAC sponsored National Conference on Modern Perspectives and Strategies in Teaching, Learning and Evaluation, The M.D.T. Hindu College on 30.09.2016 and 01.10.2016, Published by HINDCO Publications ISBN 978-81-932645-2-2
- 12. 'Radio Mean Square Labeling of some cycle related graphs' in the Proceedings of the 1<sup>st</sup>
  International Conference on Collaborative Research in Mathematical Sciences
  (ICCRMS'17) on 23<sup>rd</sup> Sep 2017, ISBN 978-1-941505-95-3

## Papers published in Books (With ISBN)

- 1. 'Graphoidal Topology' in the Proceedings of National Seminar on Applications of Mathematics conducted by St, Joseph College, (2000), p51-52
- 'Topological Difference labelling and topological common weight decomposition' in the Proceedings of International Conference on Mathematics and Computer Science, Loyola College, (January 2009), p5-9, ISBN 978-81-8371-194-4
- 3. 'Skolem Difference Mean labelling of Combs and Trees' in the Proceedings of National Seminar on "Recent Developments in Pure and applied Mathematics", Standard fireworks, (13-09-2011), p1-5, ISBN 978-93-80368-13-9
- 4. 'Skolem Difference Mean Labeling of finite union of bipartite graphs' in the Proceedings of National Conference on Recent advancement in Science & humanities, (2011), p1-6, ISBN 978-81-920799-1-2
- 'Changing and unchanging GSE for vertex removal in graphs' in the proceedings of the International Conference on Applied Mathematics and Theoretical Computer Science sponsored by DRDO, DST, CSIR and IEEE(Madras section)and organized by St.Xavier's Catholic College of Engineering, Nagercoil on 24th and 25th January 2013. ISBN 978-93-82338-35-2.
- 6. 'Changing and Unchanging Strong Efficient Domination Number for an Edge Removal/Addition in Graphs' in the book Advances in Domination Theory II edited by V.R.Kulli (2013) p45-54. ISBN: 81-900205-6-0.
- 7. 'Perfect Edge domination and perfect edge covering domination sets in graphs' in the Proceedings of the UGC sponsored Two-Day 'National Seminar on Recent Developments in Functional Analysis, Topology and Graph Theory' on 28.12.2015, ISBN: 978-81-931128-1-6.
- 8. 'Perfect edge covering and perfect edge vertex domination sets' in graphs in graphs in the Proceedings of the UGC sponsored Two-Day 'National Seminar on Recent Developments in Functional Analysis, Topology and Graph Theory' on 28.12.2015, ISBN: 978-81-931128-1-6.
- 9. 'Adventures of Modern Teaching' in the Proceedings of NAAC sponsored National

- Conference on Modern Perspectives and Strategies in Teaching, Learning and Evaluation, The M.D.T. Hindu College, 30.09.2016 and 01.10.2016, ISBN 978-81-932645-2-2, Published by HINDCO Publications.
- 10. 'E-Learning and Hybrid Teaching' in the Proceedings of NAAC sponsored National Conference on Modern Perspectives and Strategies in Teaching, Learning and Evaluation, The M.D.T. Hindu College, 30.09.2016 and 01.10.2016, ISBN 978-81-932645-2-2, Published by HINDCO Publications.
- 11. 'Radio Mean Square Labeling of some cycle related graphs' in the Proceedings of 1<sup>st</sup>
  International Conference on Collaborative Research in Mathematical Sciences
  (ICCRMS'17) 23<sup>rd</sup> Sep 2017, ISBN 978-1-941505-95-3
- 12. 'மனித வாழ்க்கையில் கணிதத்தின் பங்கு' in Kavya Publications, (2017), 142-143 ISBN 2277-9221

## **Orientation/ Refresher Courses attended**

- 1. Orientation Programme sponsored by UGC and conducted by the Academic Staff College of Madurai Kamaraj University from 16-08-1993 to 17-09-1993.
- 2. Refresher Course in Mathematics sponsored by UGC and conducted by the Academic Staff College of Madurai Kamaraj University from 16-08-1993 to 17-09-1993
- 3. Refresher Course in Mathematics sponsored by UGC and conducted by Aligarh Muslim University, Aligarh U.P from 07-02-1998 to 28-02-1998
- 4. Refresher Course in Mathematics sponsored by UGC and conducted by University of Kerala, Trivandrum from 20-09-2002 to 11-10-2002
- 5. 'NSS Orientation Training Programme' conducted by Avinasilingam Deemed University, Coimbatore for 10 days

# International/National/State Seminars/Conferences attended

- 1. National Conference held at Manonmaniam Sundaranar University, Tirunelveli from 04.02.2009 to 06.02.2009
- 2. State level seminar organized by the Department of Mathematics, Madura College, Madurai on 10.02.2010

- 3. Tamilnadu Science Congress Conference held at Manonmaniam Sundaranar University,
  Tirunelveli from 21.05.2010 to 23.05.2010
- International Conference on Environment Security for Food and Health organized by the Department of Zoology, The M.D.T. Hindu College, KKT & EPS Canada, Kanyakumari from 16.02.2012 to 18.02.2012
- 5. State Level Seminar on 'Cellular Automata' Organized by the Department of Mathematics, Sadakathullah Appa College, Tirunelveli on 01.03.2013
- 6. State Level Seminar on 'Towards Inclusive, equitable, secular and quality Higher Education for All' Organized in Commemoration of MUTA XXII Conference, Tirunelveli on 27.09.2014
- 7. International Conference on Theoretical Computer Science & Discrete Mathematics organized by the Department of Mathematics, SSN College of Engineering, Chennai on 09.12.2014 & 10.12.2014

## Workshops attended

- 1. Workshop on Action Plan on Reforms of Affiliating System: A way forward organized by University Grants Commission, South Eastern Regional Office (SERO), Hyderabad on 07.08.2012 & 08.08.2012
- Workshop on 'Puzzle Based Learning: An Introduction to Critical Thinking and Problem Solving' Organized by Curriculum Development Cell, Manonmaniam Sundaranar University, Tirunelveli on 14.08.2013

## **Books Published (With ISBN)**

- 1. 'Analysis & C' published by Harrows, ISBN: 978-93-83581-12-2
- 2. 'Programming with C++' published by Harrows, ISBN:978-93-83581-13-9
- 3. 'Career and Competition' published by Harrows, ISBN 978-93-89581-14-6
- 4. 'Combinatorial Mathematics' published by Emerald, ISBN:978-81-7966-411-7

## **Books Published (Without ISBN)**

'Astronomy,' DD & CE, MSU published by Rainbow Creators

#### Ph.D Guidance

Awarded : 14
Submitted : 01
Under Progress : 01

#### M. Phil Guidance

Awarded : 22

## Served as Resource person

- Acted as Chairperson in the International Conference on Discrete and Computational Mathematics organized by the Department of Mathematics, Gandhigram Rural University, Dindigul on 16-02-2017 to 17-02-2017
- 2. Served as Resource Person in the State level Seminar on Analysis and Topology organized by the Department of Mathematics, S.A.College, Palayamkottai.
- 3. Delivered a lecture on 'Skolem mean labelling on a graph' in the Association Meeting, S.A.College, Palayamkottai
- 4. Delivered a lecture on 'Topological graphs ' in the Association Meeting, St.Xavier's College, Palayamkottai

#### Other Activities

- Served as an External Examiner for B.Sc (CS) Ancillary practical examination at VOC College, Tuticorin from 21-3-1997 to 25-3-1997
- 2. Served as N.S.S Programme Officer for 4 years 6 months
- 3. Served as NAAC / IQAC Co-Ordinator from 01-07-2004 to 25-01-2012
- 4. Served as Dean, College Development council, M.S. Univeristy, Tirunelveli from 29.06.2012 to 27.06.2014
- 5. Additional Charge of Manonmaniam Sundaranar University Colleges and Constituent Colleges Section for 10 Months (17.12.2012 to 24.10.2013).
- 6. Served as EDITOR in the Publications of Proceedings with ISBN of the National

- Seminar on "Recent Developments in Functional Analysis, Topology and Graph Theory" held on 26-03-2015 & 27-03-2015 organized by the P.G & Research Department of Mathematics, The M.D.T Hindu College
- 7. Acted as Chairperson in the International Conference on Discrete and Computational Mathematics organized by the Department of Mathematics, Gandhigram Rural University, Dindigul on 16-02-2017 to 17-02-2017
- 8. Served as member in M.S University P.G Board of Studies in Mathematics
- 9. Served as member in S.A College U.G Board of Studies in Mathematics