



Dr.S.ARUMUGAM

CURRICULUM VITAE

DOB

July 7,1943

POSITIONS HELD

1. Assistant Professor, Department of Mathematics, St. John's College, Palayamkottai-627 002 from July 10, 1968 to June 14,1971.
2. Professor and Head, Post-graduate, Department of Mathematics, St. John's College, Palayamkottai-627 002 from June 15,1971 to September 14,1992.
3. Professor and Head, Department of Mathematics, Manonmaniam Sundaranar University, Tirunelveli-627 012 from September 15,1992 to July 31,2003.
4. Senior Professor (Research) & Director (R&D), Arulmigu Kalasalingam College of Engineering, Krishnankoil-626 190 from August 4, 2003 to till date. (AKCE has been upgraded as Kalasalingam University from November 2006)
5. Conjoint Professor, School of Electrical Engineering and Computer Science The University of Newcastle, NSW 2308, Australia for a period of three years from 18th September 2009
6. Adjunct Professor, Department of Computer Science, Ball State University, Muncie, Indiana 47306, USA for a period of three years starting from March 2012.
7. Visiting Professor, Department of Computer Science, Liverpool Hope University, Liverpool, UK for a period of two years starting from January 2012.
8. Adjunct Professor, BITS-Pilani for a period of one year starting from August 2015.

ACADEMIC QUALIFICATIONS

M.Sc.	University of Madras	1967 First Class
M.Phil.	Madurai Kamaraj University	1968 First Class
Ph.D.	Madurai Kamaraj University	1978
Title of the thesis: Topological Projective Planes.		

No. of years of experience in Teaching and Administration: 46

Area of Specialization: Graph Theory and its applications, Fuzzy logic and its applications to pattern recognition, Topology , Geometry and Visual Cryptography.

MEMBERSHIP OF PROFESSIONAL BODIES

- Life member of Indian Mathematical Society.
- Life member of Ramanujan Mathematical Society.
- Life member of Calcutta Mathematical Society.
- Member of American Mathematical Society.
- Member of Mathematical Association of America (MAA)
- Life Member of Indian Society for Technical Education (ISTE)
- Life Member of Academy of Discrete Mathematics and Applications (ADMA)
- Member of Institute of Combinatorics and its Applications

Conferences/Seminars Attended And Special Lectures Delivered

1. All India Level Summer Institute in Algebra at Ramanujan Institute for Advanced Study in Mathematics from May 8 to June 15, 1972.
2. All India Level Summer Institute in Analysis at Ramanujan Institute for Advanced Study in Mathematics during May 2-31, 1973.
3. Workshop in Geometry at Madurai Kamaraj University from May 12 to June 17, 1975.
4. Workshop in Analysis and Applications at Madurai Kamaraj University from May 3 to June 5, 1976.
5. Summer Institute in Topics in Number Theory at Madurai Kamaraj University from May 7 to June 2, 1979.
6. Summer Institute in Functional Analysis and Applications at Madurai Kamaraj University from May 25 to June 20, 1981.
7. All India Summer Institute on Probability and Stochastic Process at Annamalai University from November 26 to December 26, 1981.
8. Lectures on *Graph Theory* at G.V.N. College, Kovilpatti during January 9-15, 1982.
9. 48th Annual Conference of the Indian Mathematical Society at Bahalpur University during December 26-28, 1982.
10. 49th Annual Conference of the Indian Mathematical Society at I.I.T., Madras during December 26-28, 1983.
11. All India Summer Institute on Number Theory at Ramanujan Institute for Advanced Study in Mathematics from May 28 to June 26, 1984.
12. Certificate Course in Computer Systems and Programming Languages at Tamil University, Thanjavur during March 1-28, 1985.
13. First Annual Conference of the Ramanujan Mathematical Society at Karnataka University, Dharwad during June 5-27, 1986.
14. Course on Mathematical Structures in Computer Science and Data Structure at I.I.T., Delhi during December 2-20, 1986.
15. Fourth Annual conference of the Ramanujan Mathematical Society at Alagappa University, Karaikudi during May 20-22, 1989.

16. Lectures on *Functional Analysis* at the U.G.C. Sponsored Refresher Course on Functional Analysis and Applications at St. Joseph's College, Trichy during May 23-27, 1989.
17. National Seminar on Current Trends in Graph Theory and Its Applications at Annamalai University during February 21-28, 1990.
18. Symposium on Trends in Algebra and Topology at Madurai Kamaraj University during December 18-22, 1991.
19. Invited talk on *Applications of Algebra to Graph Theory* in the National Seminar on Algebra and Applications at Ramanujan Institute for Advanced Study in Mathematics during January 27-29, 1992.
20. Invited talk on *Topological Projective Planes* in the Symposium on Algebra and Topology at Madurai Kamaraj University during December 18-22, 1992.
21. National Seminar on Graph Theory and Its Application at Annamalai University during January 5-7, 1993.
22. Invited talk on *Matrix Algebra* in the First Refresher Course in Mathematics at Bharathidasan University, Trichy during December 14-16, 1993.
23. One-day Seminar on Mathematical Methods and Applications at I.I.T., Madras on December 22, 1993.
24. Invited talk on *Domination in Graphs* in the One-day Seminar on Recent Trends in Mathematics at Loyola College, Madras on February 25, 1994.
25. Invited talk on *Bipartite Graphoidal Graphs* in the National Workshop on Graph Theory and Its Applications held at Manipal Institute of Technology during April 4-11, 1994.
26. National Seminar on Pedagogic Mathematics organized by the Calcutta Mathematical Society, Calcutta during September 6-8, 1994.
27. Invited talk on *Functions of Several Variables* in the Third Refresher Course in Mathematics at Bharathidasan University, Trichy during October 2-4, 1994.
28. Invited talk on *Graph Theory and Its Applications* in the Fourth Refresher Course in Mathematics at Bharathidasan University, Trichy from November 14, 1994 to December 15, 1994.
29. Invited talk on *Partially Ordered Sets and Graphs* in the Fourth Ramanujan Symposium on Algebra and Its Applications at Ramanujan Institute for Advanced Study in Mathematics during February 1-3, 1995.
30. Invited talk on *Graph Labelling Problems* in the One-day Seminar on Recent Trends in Graph Theory and Its Applications at Loyola College, Madras on March 3, 1995.
31. Popular lecture on *Domination in Graphs* organized by the School of Mathematics, Madurai Kamaraj University on March 11, 1995.
32. Tenth Annual Conference of the Ramanujan Mathematical Society at P.T.L.M.S. Government College, Rishikesh during May 25-27, 1995.
33. Invited talk on *Decompositions into Minimum Path Covers and Difference Labelings of Graphs* in the International Conference on Number Theory and Discrete Mathematics held at Trichy during January 3-6, 1996.

34. Special lecture on *Graphoidal Covers and Graphoidal Graphs* in the National workshop on Graph Theory and its Applications at Manonmaniam Sundaranar University, Tirunelveli during February 21-27, 1996.
35. Invited talk on *Randomly Packable Graphs* in the One-day Seminar on Graph Theory and its Application held at MEPCO Schlenk Engineering College on July 20, 1996.
36. Invited talk on *Applications of Graph Theory to Real Life Problems* in the National Seminar on Mathematical Modeling and Computer Simulation for Real Life Situations held at St. Xavier's College, Palayamkottai during August 27-29, 1996.
37. Invited talk on *Domination Parameters of Graphs* in the refresher course for College Teachers held at Madurai Kamaraj University during September 13-14, 1996.
38. Invited talk on *Applications of Graph Theory* in the Two-day Seminar on Recent Developments and Applications in Mathematics held at Seethalakshmi Ramasamy College, Trichy during January 24-25, 1997.
39. Invited talk on *Graphoidal Covers of a Graph and its Applications* in the Two-day Seminar on Mathematical Modelling held at St. Joseph's College, Trichy during January 30-31, 1997.
40. Lectures on *Graph Theory* in the UGC sponsored Refresher Course for College Teachers at S.B.College, Chenganacherry, Kerala from February 27, 1997 to March 1, 1997.
41. Invited talk on *Graphoidal Covering Number of a Graph* in the National Seminar on Graph Theory and its Applications at University of Bombay, Mumbai during April 23-25, 1997.
42. Twelfth Annual Conference of the Ramanujan Mathematical Society at JNN College, Shimoga during May 22-24, 1997.
43. Conference on Fuzzy sets and their Applications at I.I.T., Chennai during June 9-10, 1997.
44. Invited talk on *Tree t-spanners* in the National Seminar on Combinatorial Mathematics and its Applications at Karantak University, Belgaum Campus, Belgaum during September 25-27, 1997.
45. Invited talk on *Graphoidal Graphs* in the International Seminar on Discrete Mathematics and Related Topics organized by Academic Forum at New Delhi during November 10-13, 1997.
46. Lead talk on *Graphoidal Covers of a graph* in the Project Monitoring Committee meeting of Department of Science and Technology at University of Mysore during December 1-5, 1997.
47. Lectures on *Domination parameters of a Graph* in the UGC sponsored Refresher Course for College Teachers at Mahatma Gandhi University, Kottayam during January 19-20, 1998.

48. Invited talk on *Three domination related Parameters of a Graph* in the National Seminar on Graph Connections at Cochin University of Science and Technology, Cochin during January 28-31, 1998.
49. Invited talk on *Applications of Graph Theory* in the Department of Mathematics, Bangalore University, Bangalore on February 11, 1998.
50. Invited talk on *Graph Coloring Problems and Algorithms* at Karnatak University, Belgaum Campus, Belgaum during February 12-13, 1998.
51. Lecture on *Number Theory and Graph Theory* in the UGC sponsored Refresher Course for College Teachers at Pondicherry University on March 9, 1998.
52. Lectures on *Applications of Graph Theory to Chemistry and Social Sciences* in the UGC sponsored Refresher Course for College Teachers at Bharathidasan University, Trichy during March 20-21, 1998.
53. Lectures on *Applications of Graph Theory* in the UGC sponsored Refresher Course for College Teachers at Mahatma Gandhi University Kottayam during March 27-28, 1998.
54. Lectures on *Applications of Graph Theory* in the UGC sponsored Refresher Course for College Teacher at Bharathiar University, Coimbatore during July 30-31, 1998.
55. Invited talk in the One-day Workshop on Intelligence Quotient, Mepco Schlenk Engineering College, Sivakasi, October 15, 1998.
56. Invited talk in *Equality of Edge Domination Parameters in Graph* in the International Conference on Combinatorics, Statistics Pattern Recognition and related areas at University of Mysore during December 28-30, 1998.
57. UGC South Zone Workshop on Mathematics at Bangalore University during May 17-20, 1999.
58. Lectures on *Graph Theory* in the UGC sponsored refresher course at Mahatma Gandhi University, Kottayam during April 16-17, 1999.
59. D.S.T Sponsored Group Monitoring Workshop on Mathematical Sciences, University of Pune, September 2, 1999.
60. Invited talk on *Recent Developments in Graph Theory* in the UGC sponsored refresher course at University of Kerala, Thiruvananthapuram, January 11, 2000.
61. Invited talk on *Equivalent Formulations of Four Color Theorem* in the Annual conference of Kerala Mathematical Association, January 19, 2000.
62. National Seminar on "Examination reforms in Tamil Nadu Universities", Mother Teresa Women's University, Kodaikanal, March 21, 2000.
63. D.S.T Sponsored Project Review Committee meeting on "Semigraphs and their Applications", at University of Mysore, Mysore, May 24-30, 2000.
64. Invited talk on *A Generalisation of Edge Chromate number using acyclic graphoidal covers* in the Ninth Quadrennial International Conference on Graph Theory, Combinatorics, Algorithms and Applications at Western Michigan University, Kalamazoo, USA during June 4-9, 2000.

65. Invited talk on *Randomly Packable Graphs – A survey*, in the National Conference on Graph Theory and its Applications at Anna University, Chennai during March 14-16, 2001.
66. Invited talk on *Number Theory in Graphs* in the National Conference on Number Theory and its Applications at Sri Venkateswara University , Tirupathi during March 22-24, 2001.
67. Invited talk on *Applications of Graph Theory to Social Science* in R. Balakrishnan Endowment lectures at Annamalai University, Annamalainagar on March 02, 2001.
68. Invited talk on *Applications of Graph Theory to Social Sciences* in the One-day Seminar on Applications of Mathematics and Statistics at Madurai Kamaraj University, Madurai on March 16, 2001.
69. Invited talk on *Equivalent Formulations of Four Color Theorem – Ramanujan Endowment Lecture* at Alagappa University, Karaikudi on May 08, 2001.
70. National Seminar on “Technology Enabled flexible education and Development” at Punjab University, Chandigarh, December 5-8, 2001.
71. Invited talk on *Applications of Graph Theory* in the One-day seminar on Applications of Mathematics at Vivekananda College, Tiruvedagam West, Madurai, January 22, 2002.
72. Invited talk on *Applications of Graph Theory* in the State level Conference on “Challenges in Research and Teaching of Mathematics” at Stella Mary's College, Chennai, 31st January and 1st February 2002.
73. Invited talk on *Cayley Graphs* in the State level Conference on Applications of Mathematics at G.V. College for Women, Udumalpet, 2nd February 2002.
74. Invited talk on *Graph Algorithms and NP-Complete Problems* in the UGC sponsored Refresher Course, Holy Cross College, Nagercoil, November 5-6, 2001.
75. Invited talk on *Graph Theory and its Applications* as a UGC visiting fellow at Sri Padmavathi Mahila Vidyalaya, Tirupathi, February 25- March 2, 2002.
76. Invited talk on *Asteroidal sets in Graphs* in the National Conference on Algebra and Discrete Mathematics” at University of Kerala, Thiruvananthapuram, October 23-25, 2002.
77. Invited talk on *Measure Theory* in the UGC sponsored refresher course at Holy Cross College, Nagercoil, November 11, 2002.
78. Presented a paper on *Asteroidal Chromatic Number of a Graph* in the R.C.Bose Centenary Symposium on Number Theory and Discrete Mathematics, Indian Statistical Institute , Kolkata, December 19-23, 2002.
79. Invited talk on *Path decompositions of a graph- A survey* in the National Seminar on Discrete Mathematics and its Applications and Annual Conference of Kerala Mathematical Association, January 9-11, 2003.
80. Gave three lectures on Trees and its Applications in the Instructional and institutional programme on Discrete Mathematics, Ramanujan Institute for Advanced Study in Mathematics, University of Madras, Chennai, February 6-8, 2003.

81. Invited talk on *Asteroidal sets-Algorithmic Aspects* in Seminar in Mathematics at Cochin University of Science and Technology on May 30 and 31, 2003.
82. Guest Lecture on *Cayley Graphs and its Applications to parallel Computing* on 27-9-2003 at SFR College, Sivakasi under the Virudhunagar District cluster College Joint faculty Programme.
83. Invited talk on *Sports Psychology* in the Asia-specific International Conference for sports Administrators at Kanyakumari on 28-9-2003, organized by the Department of Physical Education and Sports, Manonmaniam Sundaranar University, Tirunelveli.
84. Popular Lecture on *Applications of Graph Theory* at Arulmigu Kalasalingam College of Arts and Science, September 11, 2003.
85. Invited talk on *Fractional Graph Theory* in the Research Oriented Lecture Series in Mathematics at Manonmaniam Sundaranar University, Tirunelveli, September 13, 2003.
86. Invited talk on *Fractional Domination* in the Research Oriented Lecture Series in Mathematics at Manonmaniam Sundaranar University, Tirunelveli, October 11, 2003.
87. Invited talk on *Fractional Graph Theory* in the UGC Sponsored Refresher Course in Mathematics for College Teachers at Bharathiar University, Coimbatore on October 17 and 18, 2003.
88. Invited talk on *Fractional Graph Theory* in the UGC Sponsored Refresher Course in Mathematics for College Teachers at Ayya Nadar Janaki Ammal College, Sivakasi on November 1 and 3, 2003.
89. Invited talk on *Fractional Colorings* in the Research Oriented Lecture Series in Mathematics at Manonmaniam Sundaranar University, Tirunelveli, November 8, 2003.
90. Invited talk on *Fractional Graph Theory* in the UGC Sponsored Refresher Course in Mathematics for College Teachers at Holy Cross College, Nagercoil on November 17, 2003.
91. Invited talk on *Fractional Isomorphism* in the Research Oriented Lecture Series in Mathematics at Manonmaniam Sundaranar University, Tirunelveli, on December 13, 2003.
92. Invited talk on *Research Methodology* organized by ISTE-AKCE CHAPTER at Arulmigu Kalasalingam College of Engineering, Krishnankoil, on January 1, 2004
93. Invited talk on *Matroid Theory* in the Research Oriented Lecture Series in Mathematics at Manonmaniam Sundaranar University, Tirunelveli, January 10, 2004.
94. Invited talk on *Improving the quality of teaching calculus* in the International conference on Teaching of Calculus at University of Kerala, Thiruvananthapuram, January 12-14, 2004.

95. Invited talk on *Rational approach to Graph Theory* in the National Seminar on Graph Theory and Applications at Government College , Kottayam, Kerala, February 19 and 20, 2004.
96. Invited talk on *Graph Theory and its Applications* in the UGC sponsored Refresher Course, University of Kerala, Thiruvananthapuram, February 20-21, 2004.
97. Invited talk on *Fractional Graph Theory* in the Seminar on Recent Trends in Graph Theory at School of Mathematics, Madurai Kamaraj University , March 5, 2004.
98. Invited talk on *Fractional Graph Theory* in the National Seminar on Recent Trends and Applications of Mathematics in Engineering at Mepco Schlenk Engineering College, Sivakasi, March 6, 2004.
99. Invited talk on *Graph Theory and Computers* in the National Seminar on Interdependence of Mathematics and Computer Science at Fatima College, Madurai, March 11, 2004.
100. Invited talk on *Interconnection Networks and Parallel Computing* in the UGC Sponsored State Level Conference on Graph Theory and its Applications at Lady Doak College, Madurai, August 2-3, 2004.
101. Invited talk on *Cayley Graphs* at VVV College, Virudhunagar, August 9, 2004.
102. Invited talk on *Partially ordered sets and Graphs* in the UGC Sponsored state level seminar on Topics in algebra at RDM College Sivagangai, 15-October , 2004.
103. Invited talk on *Domination chain in graphs* in the DST Sponsored Group discussion on Domination in Discrete structures at EMG Yadhava womens college, Madurai, November 14-16, 2004.
104. Invited talk on *Basic dominating functions* in the National Conference on Graphs, Combinatorics, Algorithms and Applications at Arulmigu Kalasalingam College of Engineering, Krishnankoil during November 25-29, 2004.
105. Invited talk on *Cayley graphs and interconnection Networks* in the UGC Sponsored refresher course organized by Academic staff college, University of Pune at New Arts Commerce and Science college at Ahmednagar during December 2-4, 2004.
106. Lectures on *Applications of Graph theory to Interconnection Network and Parallel computing* in the ISTE-Sponsored Short term training programme at Algorithms and Applications at Arulmigu Kalasalingam College of Engineering, Krishnankoil during December 06-12, 2004.
107. Invited talk on *Research Methodology* in the ISTE-Sponsored Short term training programme on Research methods in Business at at Arulmigu Kalasalingam College of Engineering, Krishnankoil , 08- December 2004.
108. Invited talk on *Intersection Graphs* in One day Seminar on Discrete and Stochastic Structures at Alagappa University, Karaikudi on December 20, 2004.
109. Invited talk on *Independence Saturation and Knockout number of a Graph* in the National Conference on The Emerging Trends in Pure and Applied Mathematics at St. Xavier's College, Palayamkottai, Tirunelveli during January 27-29, 2005.

110. Invited talk on *Convexity Graphs* in Brainstorming Session on Product Graphs and their Applications at Bishop Heber College, Tiruchirappalli during February 21-22, 2005.
111. Invited talk on *Applications of Graph Theory to Parallel Computing* at Marthoma College, Kerala on February 28, 2005.
112. Invited talk on *Applications of Graph Theory to Parallel Computing* in The Annual Conference of Kerala Mathematical Society at Rajagiri College of Engineering, Cochin during March 11-13, 2005.
113. Invited talk on *Cayley Graphs* in the Ramanujan Memorial seminar at Annamalai University, Annamalai Nagar on 18th April, 2005.
114. Invited talk on *Quivers* in the National Conference on the Spirit, Culture and Relevance of Mathematics at Saraswathi Narayanan College, Madurai during May 27-28, 2005.
115. First Graph Theory day at Christ College, Bangalore on 10th June 2005.
116. Invited talk on *Signed graph and its Applications* in the UGC sponsored National Conference on Discrete Mathematics and Graph Theory at Sri Narayana College, Punalur during July 7-8, 2005.
117. Invited talk on *Dominating Functions* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Saraswathi Narayanan College, Madurai on August 13, 2005.
118. Invited talk on *Minimal Dominating Functions* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Alagappa University, Karaikudi on August 27, 2005.
119. Invited talk on *Universal Dominating Functions* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Arulmigu Kalasalingam College of Arts and Science, Krishnankoil on September 10, 2005.
120. Invited talk on *Graphs and Partially Ordered Sets* in State Level Conference on Recent Development in Applied Mathematics at Jayaraj Annapackiam College for Women, Periyakulam on September 21, 2005.
121. Invited talk on *Singed Graphs and its Applications* in UGC (COSIP) sponsored state level seminar on Recent Development in Graph Theory at A . P. C. Mahalaxmi College for Women, Tuticorin on September 23 , 2005.
122. Invited talk on *Fractional Independent Functions* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Lady Doak College, Madurai on October 8, 2005.
123. Invited talk on *Domination related Functions in Graphs* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Alagappa University, Karaikudi on October 22, 2005.
124. Special lecture on *Analysis and Topology* at Christ College, Bangalore on November 10, 2005.

125. Invited talk on *Signed graph and Matrices* in DST sponsored Group Discussion on Signed Discrete Structures and Applications at Regional Institute of Education, Mysore during November 15-17, 2005.
126. Invited talk on *Simple Path Covers in a Graph* in 30th Australasian Conference on Combinatorial Mathematics and Combinatorial Computing at University of Queensland, Brisbane, Australia during December 5 – 9, 2005.
127. Invited talk on *Simple Path Covers in a Graph* and “Domination Related Functions in Graphs” at University of Malaya, Kuala Lumpur on 12-12-2005.
128. Invited talk on *Domination Related Functions in Graphs* in Third National Conference on Mathematical and Computational Models at PSG College of Technology, Coimbatore on 15-12-2005.
129. International Conference on “Emerging Adaptive Systems and Technologies (EAST -2005) at Noorul Islam College of Engineering, Kumaracoil – 629 180, December 16-17, 2005.
130. Invited talk on *Graph theoretic techniques in Data Mining* in the UGC Sponsored National Conference on Mobile Computing and Data Mining, at EMG Yadava Women’s College, Madurai on 23rd December, 2005.
131. CARDMATH Core Project Formulation Meeting of DST at University of Mysore, Mysore during December 28-30,2005.
132. Invited talk (Three lectures) on *Simple Path Covers in a Graph*, National Workshop on Decompositions of Graphs and Product Graphs, at Annamalai University, Annamalai Nagar during January 3-7, 2006.
133. Invited talk on *Sets of Permutations that Generate the Symmetric Group Pairwise*, DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Manonmaniam Sundaranar University Schaffter Hall, Tirunelveli on 21-01-2006.
134. Invited talk on *Graphs and Designs* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Arulmigu Kalasalingam College of Engineering, Krishnankoil on 28-01-2006.
135. Invited talk on *Dominating Functions in Trees* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at K.L. N. College, Pottapalayam on 11-02-2006.
136. Invited talk on *Graph Algorithms and Designs* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Alagappa University, Karaikudi on 25-02-2006.
137. Invited talk on *Convexity of Minimal Dominating Functions of Trees- I* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Arulmigu Kalasalingam College of Engineering, Krishnankoil on 11-03-2006.

138. Invited talk on *Convexity of Minimal Dominating Functions of Trees- II* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Arulmigu Kalasalingam College of Engineering, Krishnankoil on 08-04-2006.
139. Invited talk on *Domination, Independence and Irredandence* in the Instructional Workshop on Applications of Graph Theory in Chemistry at Department of Mathematics, Karnatak University, Dharwad, Karnataka during 27th -31st March 2006.
140. Invited talk on "Domination in Fuzzy Graphs" in the National Seminar on Frontiers of Discrete and Fuzzy Mathematics at Department of Mathematics, S.B. College, Changanacherry, Kottayam, Kerala during 16th – 18th February, 2006.
141. Invited talk (Five Lectures) on "*Common Weight Decomposition Into Minimum Acyclic Graphoidal Covers*" in the *n*-CARDMATH Group Discussion on Labelings of Discrete Structures and Applications at Department of Mathematics, Mary Matha Arts and Science College, Mananthavady, Kerala during 19th – 28th April 2006.
142. Invited talk on *Some Conjectures on Path Decomposition of a Graph* in the National Seminar on Graph Theory and Algorithms at PESIT, Bangalore during 10th – 12th June 2006.
143. Invited talk on *Total Dominating Functions* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Arulmigu Kalasalingam College of Engineering, Krishnankoil on 24-06-2006.
144. Invited talk on *Existenece of Universal Minimal Total Dominating Functions* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Arulmigu Kalasalingam College of Engineering, Krishnankoil on 08-07-2006.
145. Invited talk (Two lectures) on *Universal Minimal Total Dominating Function in a Graph* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Thiagarajar College, Madurai on 22-07-2006.
146. Invited talk on *Algebraic Structures* in the Two day workshop on Discrete Mathematics at Jamal Mohammed College, Tiruchirappalli on 23-07-2006.
147. Invited talk on *Domination Related Functions in Graphs* in the UGC sponsored State level conference on Recent Advancements in Graph Theory and its Applications held at SFR College, Sivakasi during 18th August 2006 to 19th August 2006.
148. Invited talk on *Convexity of Minimal Total Dominating Functions in Graphs* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Arulmigu Kalasalingam College of Engineering, Krishnankoil on 12-08-2006.
149. Invited talk on *Universal Minimal Total Dominating Functions in Trees* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Arulmigu Kalasalingam College of Engineering, Krishnankoil on 26-08-2006.

150. Invited talk on *Topological Projective Planes* in the Workshop on Geometry and Its Applications held at School of Mathematics, Madurai Kamaraj University, Madurai on 8th September 2006.
151. Invited talk on *Minimality and Convexity of Domination and Related Functions in Graphs* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Arulmigu Kalasalingam College of Engineering, Krishnankoil on 09-09-2006.
152. Invited talk on *A Linear Algorithm for Universal Minimal Dominating Functions in Trees* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Arulmigu Kalasalingam College of Engineering, Krishnankoil on 23-09-2006.
153. Invited talk on *Path Covers in a Graph* in the National Workshop on Graph Theory and Applications held at NERIST, Nirjuli, Itanagar, Arunachal Pradesh during 09th October to 14th October, 2006.
154. Invited talk on *Convexity of Minimal Dominating Functions and Universals in Graphs* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Arulmigu Kalasalingam College of Engineering, Krishnankoil on 28-10-2006.
155. Invited talk on *Probability Theory* in the FDTP on Probability Theory and Random Process held at Sree Sowdambika College of Engineering, Aruppukottai during 06th November 2006 to 18th November 2006.
156. Invited talk on *Graph Theory and its Applications* in the UGC sponsored Refresher Course, University of Kerala, Thiruvananthapuram, November 20-21, 2006 .
157. Invited talk on *Maximal Irredundant Functions* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Arulmigu Kalasalingam College of Engineering, Krishnankoil on 25-11-2006.
158. Invited talk on *p-norm fractional domination in graphs* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Arulmigu Kalasalingam College of Arts and Science, Krishnankoil on 09-12-2006.
159. Invited talk on *Chromatic Edge Stability Number of a Graph* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Arulmigu Kalasalingam College of Engineering, Krishnankoil on 23-12-2006.
160. Invited talk on *Independent Domination and Graph Colorings* in the International Conference on Discrete Mathematics held at Indian Institute of Science, Bangalore during December 15-18, 2006.
161. Invited talk on *Fractional Coloring Parameters of a Graph* in the National Symposium on Combinatorics, Number Theory and Geometry held at University of Mumbai, Mumbai during January 15-20, 2007.
162. Invited talk on *Cayley graphs, Interconnection Networks and Parallel Computing* in the National Seminar on Discrete Structures and Computer Applications held at PES Institute of Technology, Bangalore during January 18-19, 2007.

163. Invited talk on *Fractional Hamiltonian Graphs* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Mannar Thirumalai Naickar College, Madurai on 27-01-2007.
164. Invited talk on *Fractional Hamiltonian Graphs-II* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Kalasalingam University, Krishnankoil on 10-02-2007.
165. Invited talk on *Domination Related Functions in Graphs* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at V.V. Vaniaperumal women College, Virudhunagar on 24-02-2007.
166. Invited talk on *Domination Related Functions in Graphs* in the 19th International Conference on The Jangjeon Mathematical Society held at Bangalore University, Bangalore during February 22-24, 2007.
167. Invited talk on *Domination Related Functions in Graphs* in the State Level workshop on Recent Developments in Graph Theory held at St. Xavier's College, Palayamkottai on 26th February 2007.
168. Invited talk on *Fractional Graph Theory* in International Conference on Mathematics and Computer Science held at Loyola College, Chennai during March 01-03, 2007.
169. Invited talk on *Fractional Graph Theory* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Alagappa University, Karaikudi on 11-03-2007.
170. Invited talk on *Some conjecture on Path Decomposition of a graph* in the National Conference on Analysis and Graph Theory held at Bharathidasan University, Trichy during March 9-10,2007.
171. Invited talk on *Basic Graph Theory* in the National conference on Combinatorics and Graph Theory held at Saurashtra University, Rajkot during March 10-12, 2007.
172. Invited talk on *Fractional Colorings* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Kalasalingam University, Krishnankoil on 24-03-2007.
173. Invited talk on *Graph Algorithms* in the Two Day National conference on Applications of Graph Theory held at R.V. College of Engineering, Bangalore during April 12-13, 2007.
174. Invited talk on *Path Covering Problems* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Kalasalingam University, Krishnankoil on 21-04-2007.
175. Invited talk on *Path Covering Problems-II* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at M.T.N. College, Madurai on 28-04-2007.

176. Invited talk on *Some Conjectures on Path Decomposition of a Graph* in Graph Theory Day III, International Conference on Recent Developments in Combinatorics and Graph held at Kalasalingam University, Krishnankoil during June 10-14, 2007.
177. Invited talk on *Generalized Wheland Polynomials* in the Second Indo-US Lecture Series on Discrete Mathematical Chemistry held at Mary Matha Arts and Science College, Mananthavady during June 20-25, 2007.
178. Invited talk on *Convexity of Minimal Total Dominating Functions in Graphs* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at S.N. College, Madurai on 04-08-2007.
179. Invited talk on *A Linear Algorithm for Universal Minimal Dominating Functions in Trees* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Kalasalingam University, Krishnankoil on 06-10-2007.
180. Invited talk on *Total Dominating Functions in Trees : Minimality and Convexity* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at S.F.R. College, Sivakasi on 13-10-2007.
181. Invited talk on *Convexity of Minimal Dominating Functions of Trees* in the DST sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Kalasalingam University, Krishnankoil on 03-11-2007.
182. Invited talk on *Perfect orderable Graphs* in the Group Discussion on Perfect Graphs and their Applications held at Regional Institute of Education, Mysore during November 15-24, 2007.
183. Invited talk on *Domination Chain and Fractional Parameters* in the National Conference on Algebra, Graph Theory and Their Applications held at Manonmaniam Sundaranar University, Tirunelveli during December 5-7, 2007.
184. Invited talk on *Finite Geometries* in the National Work Shop on Uniform Hyper Graphs and their Applications held at Sir CRR Institute of Mathematics, Sir CRR Autonomous College, Eluru-534007, AP during 30th January to 5th February , 2008.
185. Invited talk on *Domination in Graphs* in the DST sponsored National Workshop Some Recent Research Directions in Graph Theory held at Dept. of Mathematics, IIT, Kharagpur, during 26-30 May 2008.
186. Invited talk on *Neighborhood Connected and Neighborhood Total Domination in Graphs* in International Conference on Discrete Mathematics held at University of Mysore, Mysore during June 06-10, 2008.
187. Invited talk on *Labelings, Decompositions and Embedding Problem* in the National Seminar on Discrete Mathematics and its Applications held at Department of Mathematics St. Pauls College, Kalamassery during June August 07-09, 2008.
188. Guest lecture on *Domination and Graph Colorings* in Department of Mathematics, at Cochin University of Science and Technology, Cochin on August 07, 2008.

189. Invited talk on *Domination and Colorings*, in the International Conference on Graph Theory and its Applications at Amrita School of Engineering, Coimbatore during December 11-13, 2008.
190. V. Ramasamy Ayier Memorial Award Lecture on *Coloring and Domination in Graphs* in the 74th Annual Conference of Indian Mathematical Society at University of Allahabad, Allahabad during December 27-30, 2008.
191. Invited talk on *Fuzzy Graphs and Applications* in the National Conference on Fuzzy Theory and Applications at St. Xavier's College, Palayamkottai during January 22-24, 2009.
192. Invited talk on *Convexity Graphs* in the National Conference on Algebra, Graph Theory and their Applications at Manonmaniam Sundarnar University, Tirunelveli during February 04-06, 2009.
193. Invited talk on *Dom-Color number of a graph*, in the National Seminar on Discrete Mathematics and Applications at Ayya Nadar Janaki Ammal College, Sivakasi during 18th -19th March 2009.
194. Invited talk on Min-Max and Max-Min Graph Saturation Parameters, in the National Conference on Discrete Mathematics at Marthoma College, Tiruvalla, Kerala 23-25, March 2009
195. *Invited talk on Dom-Color number of a graph - Complexity Issues in the National Conference on Recent Trends in Applicable Mathematics for Engineering & Technology* at K.L.N.College of Engineering, Pottapalayam during 2nd and 3rd April 2009.
196. Invited talk on *Min-Max and Max-Min Graph Saturation Parameters* in the National Conference on Fuzzy Mathematics, Graph Theory and Applications at Mepco Schlenk Engineering College, Sivakasi during 17-18, April 2009.
197. Invited talk on *Fractional Domination in Graphs* in the Workshop on GraphTheory at University of Pune, Pune during 28th -29th April 2009.
198. Gave Ten Lectures on *Basic Graph Theory* in the Advanced Instructional School (AIS), an activity sponsored by the National Board for Higher Mathematics at Bhaskaracharya Pratishtan, Pune during 8th May – 15th May 2009.
199. Participated in the 20th International Workshop on Combinatorial Algorithms (IWOCA 2009) at Hradec Nad Moravici, Czech Republic during June 28- July 2, 2009 and gave a talk on Equitable Domination in Graphs. He has also submitted the proposal for organizing this workshop at Kalasalingam University in 2012.
200. Participated in the 22nd British Combinatorial Conference (BCC 2009) at University of St. Andrews, St. Andrews, Scotland, UK during July 5-10, 2009 and delivered a talk on Maximal Independent sets in Minimum Colorings.
201. Invited talk on *Metric Dimension of a Graph* in the National seminar on Graph Theory, Networks and Algorithms at Sankara University, Kanchipuramon during July 20-21, 2009.

202. Endowment Lecture on *Finite Groups and Cayley Graphs* at St. Joseph's College, Trichy on 9th October 2009.
203. Invited talk on "Component-Complete Sets in Graphs" in the India-Taiwan Conference on Discrete Mathematics at National Taiwan University, Taipei, Taiwan during November 9-12, 2009.
204. Invited talk on "Domination in Graphs" in the National Conference on Research Trends in Applications of Mathematics at UC College, Aluva during November 19-21, 2009.
205. Invited talk on "Algebra and its Applications" in the UGC sponsored National Seminar on Applications of Algebra and Number Theory at National College, Trichy during December 4-5, 2009.
206. *Invited talk on "Graph Colorings" in the Instructional Workshop on Graph Theory at Annamalai University, Annamalai Nagar, during 29th December 2009- 11th January 2010.*
207. Invited talk on "Applications of Algebra to Graph Theory" in the National Conference on Research Trends in Applications of Mathematics at Dr. M.G.R. Janaki College of Arts and Science for Women, Chennai during January 29-30, 2010.
208. *Invited talk on "Applications of DFS and BFS" in the Instructional Workshop on Introduction to Graph Algorithms at Kalasalingam University, Krishnankoil during Feb 3-6, 2010*
209. *Invited talk on "Split Graphs and Comparability Graphs" in the Instructional Workshop Graph Algorithms at Kalasalingam University, Krishnankoil during Feb 17-24, 2010*
210. *Invited talk on "Dominator Coloring and Four Color Theorems" in the Instructional Workshop on Graph Colorings at Kalasalingam University, Krishnankoil during March 10-15, 2010*
211. *Invited talk on "Graphs and Posets" in the Instructional Workshop on Algebraic Graph Theory at Manonmaniam Sundaranar University, Tirunelveli during March 17-21, 2010*
212. *Invited talk on "Visual Cryptographic Schemes for Black and White Images – A brief Survey" in the Sixth Annual Conference of ADMA at College of Engineering, Pune during June 8-10, 2010*
213. Invited talk on "Graph Labeling Problems" in the UGC Sponsored refresher course at University of Mysore, Mysore during June 28-29, 2010.
214. Invited talk on "Applications of Graph Theory to Visual Cryptography" at Liverpool Hope University, Liverpool, UK during July 29-30, 2010
215. Invited talk on "On Dominator Colorings in Graphs" in the International Workshop on Graph Colorings at Bharathidasan University, Trichy during August 7-9, 2010.
216. Invited talk on "Fractional Metric Dimension of Graphs" in the International Conference on Recent Trends in Graphs and Combinatorics (ICRTGC 2010) at Cochin University of Science and Technology, Cochin during August 12-15, 2010.

217. Invited talk on "The Cycle Spectrum of a Graph" in the Workshop on Cycles and Colourings 2010 at High Tatras, Slovakia during September 05 - 10, 2010.
218. Presented a paper entitled "Dominators Colorings in Graphs" in the Sixth Cracow Conference on Graph Theory held at Zgorzelisko, Poland during September 12-17, 2010.
219. Guest lecture on *Dominator Colorings in Graphs* in the Department of Mathematics, Ball State University, USA on September 23, 2010.
220. Guest lecture on *Distance Magic Graphs* in the in the Department of Mathematics, Indiana University- Purdue University Fort Wayne (IPFW), USA on September 24, 2010
221. Guest lecture on Graph theoretic models for Social Networks in the Department of Computer Science, Ball State University, USA on September 29, 2010.
222. Guest lecture on Graph Coloring Problems to the graduate students in the Department of Computer Science, Ball State University, USA on September 28th and 30, 2010.
223. Guest lecture on Dominator Colorings in Graphs in the Department of Mathematics, Wright state University, Dayton, USA on October 1, 2010.
224. Guest lecture on Applications of Graph Theory to Visual Cryptography in the Department of Computer Science, City College of New York, USA on October 6, 2010.
225. Invited talk on Some New Research Directions in Domination in the 25th Clemson Mini-Conference on Discrete Mathematics and Algorithms, Clemson University, Clemson, USA during October 7-9, 2010.
226. Guest lecture on Distance Magic Graphs in the Department of Mathematics, East Tennessee State University, Johnson City, USA on October 13, 2010.
227. Guest lecture on Fractional Metric Dimension of a graph in the Department of Mathematics, Texas State University, San Marcos, USA on October 15, 2010.
228. Keynote address on Distance Magic Labellings in Graphs in the Sixth International Workshop on Graph Labellings (IWOG2010) at the University of Minnesota, Duluth, USA during October 20-22, 2010.
229. Presented a paper on Dominator Colorings in Graphs in the fiftieth Midwest Graph Theory Conference (MIGHTY L) at the University of Wisconsin – Superior, USA on October 23, 2010.
230. Invited talk on Graph Theoretic Models for Social Networks in the AICTE sponsored Staff Development Programme on *Mathematical Research Challenges in Engineering Application* at Department of Mathematics, PSG College of Technology, Coimbatore on 29th November 2010.
231. Invited talk on Inequality Chains of Graph Parameters in the National Conference on Recent Trends in Discrete Mathematics at Department of Mathematics, Nazareth Margoschis College at Pillaiyanmanai during December 9 – 11, 2010.

232. Invited talk on Some New Research Directions in Domination in the International Conference on Emerging Trends in Mathematics and Computer Applications, ICETMCA2010 at Department of Mathematics, Mepco Schlenk Engineering College, Sivakasi during December 16-18, 2010
233. Invited talk on Distance Magic Graphs in the UGC sponsored National Seminar on Recent Developments in Pure and Applied Mathematics at Department of Mathematics, The Standard Fireworks Rajaratnam College for Women, Sivakasi during January 20-21, 2011.
234. Keynote address on Cycle Spectrum of a Graph in the National Conference on Recent Trends in Graph Theory and Applications at Department of Mathematics, St. Xavier's College, Palayamkottai during February 24-25, 2011
235. Guest lecture on Applications of Graph Theory to Social Networks in the Department of Mathematics, Manonmaniam Sundaranar University, Tirunelveli on February 25, 2011.
236. Invited talk on $(k,n)^*$ -Visual Cryptography Scheme in the 7th Annual Conference of ADMA in the Department of Mathematics, National Institute of Technology, Calicut during June 9-11, 2011.
237. Participated in the International Workshop on Combinatorial Algorithms (IWCOA 2011) at University of Victoria, Canada during June 20-22, 2011 and gave a talk on "Algorithmic Aspects of Dominator Colorings".
238. Guest lecture on Fractional Graph Theory in the Department of Mathematics, Manonmaniam Sundaranar University, Tirunelveli on August 29, 2011.
239. Participated in the Second India-Taiwan Conference on Discrete Mathematics at Amrita Vishwa Vidyapeetham University, Coimbatore during September 8-11, 2011 and gave a plenary talk on Equality of domination and transversal numbers in graphs and hypergraphs.
240. Invited talk on "Graph Theoretical Models in Social Networks" in the UGC Sponsored National Seminar on Discrete Mathematics and Applications at the Department of Mathematics, M.E.S. Asmabi College, Kodungallur, Kerala during September 20-21, 2011.
241. Delivered an Open Lecture on "Visual Cryptography Scheme- A Brief Survey" in the British University in Dubai on 14-11-2011.
242. Delivered Plenary talk on "Metric Dimension of Graphs –A Brief Survey" in the International Conference on Mathematical and Computational Models (ICMCM 11) at Department of Mathematics and Computer Applications, PSG College of Technology, Coimbatore during December 19-21, 2011.
243. Invited talk on Extremal Graph Theory for Metric Dimension, in the 77th Annual Conference of the Indian Mathematical Society at Swami Ramanand Teerth Marathwada University (SRTM University), Vishnupuri, Nanded- 431 606 (MS), India during December 27-30, 2011

244. Invited talk on Game Theory for Wireless Networks, in the NBHM Sponsored National Seminar on Game Theoretical Models for Problem Solving in Wireless Networks at Departemnt of Computer Science and Engineering, National Engineering College, Kovilpatti on January 20, 2012
245. Invited talk on Basic Graph Theory in the short term course on Discrete Mathematics and Graph theory at Department of Mathematics, College of Engineering, Thiruvananthapuram on February 03, 2012.
246. Invited talk on On the uniqueness of D-vertex magic constant, in the National Seminar on Algebra, Analysis and Discrete Mathematics (NSAADM-2012) at Department of Mathematics, University of Kerala, Thiruvananthapuram, Kerala on February 10, 2012.
247. Invited talk on Fuzzy Domination in Fuzzy Graphs, in the National Conference on Fuzzy Optimization and Graph Theory with Applications (NCFOGTA'12) at Department of Mathematics, Mepco Schlenk Engg. College, Sivakasi on February 24, 2012
248. Delivered a Key note Speech on "Visual Cryptographic Scheme -A Survey" First International Conference on Computational Intelligence and its Applications (ICCIA-2012), Department of Information Technology, Vivekanandha Institute of Engineering and Technology for Woman, Elayampalayam during March 01-03, 2012.
249. Invited talk on Applications of Signed Graphs to Portfolio Analysis, in the International Conference on Mathematics in Engineering and Business Management at Loyola Institute of Business Administration, Chennai during March 09-10, 2012.
250. Invited talk on Metric Dimension of Graphs in the UGC Sponsored National Level Seminar on Recent Trends in Distance in Graphs at Department of Mathematics, Ayya Nadar Janaki Ammal College, Sivakasi on March 12, 2012.
251. Invited talk on Distance Magic Graphs in the UGC Sponsored National Conference on Recent Development in Graph Structures at Department of Mathematics Mannar Thirumalai Naicker College, Madurai on March 16, 2012.
252. Three Invited talks on Domination in Hypergraphs in the Instructional workshop on Hypergraphs and Matroids at Department of Mathematics, Annamalai University, Annamalai Nagar during March 27-31, 2012.
253. Invited talk on Applications of Graph Theory to Social Network at Department of Mathematics St. Joseph College of Engineering, Sriperumbudur on 4th May, 2012
254. Three Invited talks on Partially ordered sets and Graphs, Graphs and Vector Spaces and Graphs and Groups in the Instructional Workshop on Algebraic Graph Theory at VVV College for Women, Virudhunagar during June 04-07, 2012.
255. Frank Harary Endowment Lecture on Visual Cryptography Scheme for Graph Based Access Structure in the 8th Annual Conference of ADMA at at VVV College for Women, Virudhunagar during June 08-10, 2012.

256. Participated in the 7th International Workshop on Graph Labeling (IWOGL 2012) at University of Indonesia, Indonesia during July 23-25, 2012 and gave a talk on "Distance Magic and Distance Antimagic Graphs".
257. Participated in the International Workshop on Optimal Network Topologies (IWONT 2012) at Institut Teknologi Bandung (ITB), Bandung, Indonesia during July 27-29, 2012 and gave a talk on "Dominators Sequences in Bipartite Graphs".
258. Guest Lecture on Applications of Graph Theory at Department of Mathematics, Sri Kaliswari College (Autonomous), Sivakasi on 1st Sep 2012
259. Participated in the Two day workshop on Biomedical research and application development using Ultra-Wide Band (UWB) Radars at Department of Biomedical Engineering, PSG College of Technology, Coimbatore during September 12-13, 2012.
260. Invited talk on Dominator Sequences in Graphs in the Mini-Symposium on Graph Theory at University of Leicester, UK on 28th September 2012
261. Invited talk on Applications of Graph Theory to Social Networks in the research seminar programme of Liverpool Hope University on 10th October 2012.
262. Invited talk on Graph Theoretic Models for Social Networks – A Brief Survey in the National Seminar on Frontiers of Mathematics at Department of Mathematics, Ethiraj College for Women, Chennai during October 15-16, 2012
263. Invited talk on Chemical Applications of Graph Theory in the National Seminar on Chemical Graph Theory at Department of Mathematics, Velammal College of Engineering and Technology, Madurai on 19th October 2012.
264. Invited talk on Applications of Graph Theory to Visual Cryptography in the International Conference on Mathematics- A global scenario at Department of Mathematics, D.G.Vaishnav College, Chennai on 13th Dec 2012.
265. Invited talk on Protection of a Graph in the National conference in Discrete Mathematics and applications at Department of Mathematics, St. Xavier's College, Palayamkottai on 14th Dec 2012
266. Invited talk on Magic and antimagic labelings of graphs in the UGC sponsored National Conference on Recent Trends in Labeling and Domination in Graphs at Department of Mathematics, EMG Yadava Women's College, Madurai on 15th Dec 2012.
267. Guest Lecture on Applications of Graph Theory in the Cluster College Programme at Department of Mathematics, A.K.D. Dharma Raja Women's College, Rajapalayam on 31st Aug 2013.
268. Keynote address on Protection of Graphs in the 2nd IndoMs International Conference on Mathematics and its Applications (IICMA 2013) organized by Indonesian Mathematical Society and the Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Gadjah Mada, Yogyakarta-Indonesia during November 6-7, 2013.
269. Three invited talks on Graph Labeling Problems, Applications of Graph Theory in Social Network and Domination in Graphs in the Workshop on Graph Theory and

- Interconnection Network at Department of Applied Mathematics, Tunghai University, Taichung Taiwan during November 16-17, 2013.
270. Invited talk on Some Open Problems on Graph Labelings in the 3rd India-Taiwan Conference on Discrete Mathematics which was organized by the Department of Applied Mathematics, National Chia Tung University, Hsinchu, Taiwan during November 19-22, 2013.
 271. Invited talk on Visual Cryptography Scheme in the International Conference on Computational Intelligence, Cyber Security and Computational Models at PSG College of Engineering, Coimbatore during 19-21, December 2013.
 272. Invited talk on Protection of Graphs in the symposium on Graph Theory of 79th Annual Conference of Indian Mathematical Society held at Rajagiri College of Engineering, Cochin during December 28-31, 2013.
 273. Invited talk on Spectral Graph Theory in the Three-day workshop on Algebraic Graph Theory and Mathematics Curriculum Enrichment at Department of Mathematics, Manonmaniam Sundaranar University, Tirunelveli during January 22-24, 2014.
 274. Invited talk on Applications of Graph Theory in Computer Science in the CIT-IBM Research Promotion Programme at CIT, Coimbatore on 13th February 2014.
 275. Invited talk on Metric Dimension in Graphs in the National Meet of Research Students in Mathematical Sciences" (NMRSMS-13) at Department of Mathematics, University of Pune, Pune during 24-28 Feb, 2014.
 276. Two invited talks on Inequality Chains of Graph parameters and Spectral Graph Theory in the National Conference on Mathematical Sciences and Applications (NCMSA 2014) at Department of Mathematics, St. Joseph's College, Trichy during March 4-5, 2014.
 277. Invited talk on Dominator Sequences in Bipartite Graphs in the National Conference on Recent Advances in Graph Theory at Department of Mathematic, Periyar University, Salem during March 6-7, 2014.
 278. Invited talk on Applications of Graph Theory to Social Networks and at Department of Mathematics, BITS-Pilani, Goa Campus on 28th March 2014.
 279. Invited talk on Risk Management in Portfolios-Applications of Signed Graphs at Department of Mathematics, BITS-Pilani, Goa Campus on 3rd April 2014.
 280. Two Invited talks on Path covers and Semigraphs in the Pre-Conference Workshop on Semigraphs at Department of Mathematics, Reva Institute of Technology and Management, Bangalore during June 5-9, 2014.
 281. Invited talk on Conditional Connectivity in Graphs in the 10th Annual Conference of ADMA at Department of Mathematics, Reva Institute of Technology and Management, Bangalore during June 10-13, 2014.
 282. Invited talk on "Conditional Connectivity" in the Seminar on Research Practices on Topics in Mathematics and Computer Science at Department of Mathematics, Madras Christian College (Autonomous), Chennai – 600 059 on 7th Aug 2014.

283. Invited talk on "Cellular Manufacturing System" in UGC-Sponsored National Seminar on Graph Theory and Its Applications at Department of Mathematics, St. Xavier's College for Women, Aluva, Kerala on 8th Aug 2014.
284. Keynote Address and n invited talk on "Conditional Connectivity with Applications to Cellular Manufacturing System" in the UGC-Sponsored National Conference on Recent Advances in Pure and Applied Mathematics, at Department of Mathematics, St. Xavier's College, Palayamkottai on 3rd Sep 2014.
285. Invited talk on "Graph Access Structures with Optimal Pixel" in the International Conference on Theoretical Computer Science and Discrete Mathematics, at Department of Mathematics, SSN College of Engineering, Chennai during Dec 8-10, 2014.
286. Invited talk on "Co-Roman Domination in Graphs" in the 23rd International conference of FIM: Interdisciplinary Mathematical, Statistical and Computational Techniques at NIT, Surathkal during December 17-20, 2014.
287. Invited talk on "Metric Dimension in Graphs" in the National Conference on Discrete Mathematics at Department of Mathematics, St. Joseph's College, Trichy during January 9-10, 2015.
288. Invited talk on "Mathematics in Real Life" in the VIT Mathematical Meet 2015 at Department of Mathematics, VIT, Vellore on 31st January 2015.
289. Invited talk on "Magic and antimagic labeling of Graphs" in the National Conference on Recent Trends in Graph Theory and its Applications" (NCRTGTA-2015) at Department of Mathematics, Mangalore University, Mangalore during Feb 5-6, 2015.
290. Invited talk on "Secure Domination in Graphs" in the UGC sponsored National level Seminar on Recent Advancements in graph theory and applied mathematics at Department of Mathematics, S.F.R. College for Women, Sivakasi during March 2-3, 2015.
291. Five Invited talk on "Domination in Graphs" in the Two-day Course on Graph Algorithms and its Industrial Applications - Tutorial and Case studies at Department of Mathematics, University Sains Malaysia, Malaysia during May 11-12, 2015.
292. Keynote address on "Graph Coloring Problems" in the International Workshop on Graph Algorithms (IWGA 2015) at Department of Mathematics, University Sains Malaysia, Malaysia on 13th May 2015.
293. Invited talk on "Graph Theoretic Concepts in the Study of Biological Networks" in the International Conference on Recent, Advances in Mathematical Biology, Analysis and Applications at Department of Applied Mathematics, Aligarh Muslim University, Aligarh during June 4-6, 2015.
294. Four Invited talks on "Fuzzy Graphs and its Applications" in the ADMA Pre-Conference Workshop on Fuzzy Graphs at Department of Mathematics, B.S. Abdur Rahman University, Chennai during June 07-09, 2015.

295. Invited talk on "Graph Theoretic Concepts in the Study of Biological Networks" in the Eleventh Annual Conference of ADMA & Graph Theory Day XI at Department of Mathematics, B.S. Abdur Rahman University, Chennai during June 07-09, 2015.
296. Invited talk on "Secure Domination in Graphs" in the UGC, DST & CSIR sponsored National Conference on Discrete Mathematics and its Applications at Department of Mathematics, Manonmaniam Sundaranar University, Tirunelveli during July 15-17, 2015.
297. Invited talk on "Magic and Antimagic Labelings of graphs" in the National Workshop on Research Practices in Mathematics and Computer Science at Department of Mathematics, Jayaraj Annapackiam College for Women, Periyakulam, on 3rd Aug 2015.
298. Invited talk on "Conditional Resolving Sets" in the National Conference on Recent Developments in Coloring, Domination and Distinguishing Codes in Graphs at Department of Mathematics, Govt. Arts College, Melur on 6th Aug 2015.
299. Invited talk on "Biological Networks" in the in the 46th Annual Iranian Mathematics Conference (AIMC2015) held at Yazd University, Iran during 25-28 August 2015.
300. Presented a Paper entitled "Applications of Signed Graphs to Portfolio Turnover Analysis" in the 2nd Global Conference on Business and Social Science held at ASTON Denpasar Hotel and Convention Centre Bali, Indonesia during Sep 17-18, 2015
301. Invited talk on "Local Antimagic Chromatic Number of a Graph" in the International Conference on Graph Theory and Information Security at Institut Teknologi Bandung, Indonesia during Sep 21-23, 2015 .
302. Invited talk on "Distance Magic Labelings in Graphs" in the Graph Master Workshop at Universitas Jember, Jember, East Java, Indonesia during Sep 25-26,2015.
303. Three invited talks on Labelings, Domination and Social Networks in the SEAMS School on Coding and Graphs at Hasanuddin University, Makassar, South Sulawesi, Indonesia during 28th Sep-6th Oct 2015.
304. Invited talk on "Ethics in Research Publications" in the Workshop for Writing Computer-science-related Articles In International publication at Hasanuddin University, Makassar, South Sulawesi, Indonesia on 29th Sep 2015.
305. Invited talk on "Visual Cryptography" in the International Conference on Mathematics, Statistics, Computer Science, Mathematics Education (ICMCSME) at Hasanuddin University, Makassar, South Sulawesi, Indonesia on 2nd Oct 2015.
306. Eight lectures on "Algebraic Graph Theory " in the FDP on Linear Algebra and Graph theory at Department of Mathematics, Coimbatore Institute of Technology, Coimbatore during 30th November-1st Dec 2015.
307. Invited talk on "Srinivasa Ramanujan-Number Theory" in Department of Mathematics, Fatima College Madurai on 15th Dec 2015.

308. Presented a Paper entitled "Personal Sharing in Small Groups-A Case Study" in the 3rd Global Conference on Business and Social Science held at Hotel Nexus, Kuala Lumpur during December 16-17, 2015.
309. Invited talk on "Perfect Secure Domination in Graphs" in the International Conference on Graph Theory and its Applications at Amrita University, Coimbatore during December 18-19, 2015.
310. Invited talk on "Centrality Measures for the Study of Biological Networks" in the National Seminar on Recent Advancement on Distance, Domination and Labeling in Graphs at Department of Mathematics, The Madura College, Madurai on 21st Jan 2016.
311. Eight lectures on "NP-Completeness, Graph Algorithms and Complexity" in the FDP on Algorithm Analysis and Design at Department of Computer Science, NIT, Warangal during March 04-06, 2016.

Conferences/ Seminars Organized

1. One day Seminar on "Graph Theory and its Applications", October 17, 1993.
2. One day Seminar on "Mathematical Physics", December 13, 1993.
3. Seminar on "Algebra, Number Theory and their Application to Graph Theory", March 3-4, 1994.
4. National Workshop on "Graph Theory and its Applications", February 21-27, 1996 (Sponsored by UGC, CSIR and DST).
5. One day Seminar on "Pattern Recognition", March 30, 1996.
6. 13th Annual Conference of Ramanujan Mathematical Society, June 4-6, 1998.
7. National Conference on Discrete Mathematics and its Applications, January 3-5, 2000. (Sponsored by DST, CSIR, UGC, TNSCST).
8. DST Sponsored Research Oriented Lecture Series in Mathematics at Manonmaniam Sundaranar University, Tirunelveli. One day seminars were conducted on all second and fourth Saturday's of every month for a period of two years (2000-2002).
9. Faculty Development programme on "Probability and Random Processes", Arulmigu Kalasalingam College, Krishnankoil, (Sponsored by Centre for Faculty Development, Anna University, Chennai), Nov 24 – 29, 2003.
10. National Conference on Graphs, Combinatorics, Algorithms and Applications at Arulmigu Kalasalingam College of Engineering, Krishnankoil, November 25-29, 2004 (Sponsored by DST, CSIR, NBHM, TNSCST).
11. ISTE- Sponsored Short term training programme on Applications of Graph theory to Interconnection Networks and Parallel computing at Arulmigu Kalasalingam College of Engineering, Krishnankoil, December 06-12, 2004
12. DST Sponsored Research Oriented Lecture Series in Mathematics and Applications to Engineering at Kalasalingam University, Krishnankoil. One day seminars are conducted on all second and fourth Saturday's of every month for a period of two years (2005-2007).

13. DST Sponsored n -CARDMATH Group Discussion on Labelings of Discrete Structures and Applications at Mary Matha Arts and Science College, Mananthavady, April 19-28, 2006.
14. DST Sponsored Graph Theory Day III, International Conference on Recent Developments in Combinatorics and Graph Theory at Kalasalingam University, Krishnankoil, June 10-14, 2007.
15. DST sponsored International Conference on Discrete Mathematics held at University of Mysore, Mysore during June 06-10, 2008
16. Fifth International Workshop on Graph Labelings (IWOGL 2009) at Kalasalingam University, Krishnankoil, January 07-10, 2009 (Sponsored by Department of Science and Technology, New Delhi and Indo-US Science and Technology Forum, New Delhi)
17. Platinum Jubilee 75th Annual Conference of the Indian Mathematical Society at Kalasalingam University, Krishnankoil, December 27-30, 2009.
18. DST sponsored Instructional Workshop on Introduction to Graph Algorithms at Kalasalingam University, Krishnankoil, February 3-6, 2010
19. DST sponsored Instructional Workshop on Graph Algorithms at Kalasalingam University, Krishnankoil, February 17-24, 2010
20. DST sponsored Instructional Workshop on Graph Colorings at Kalasalingam University, Krishnankoil, March 10-15, 2010.
21. DST sponsored Instructional Workshop on Mathematical Modeling and Simulation at Kalasalingam University, Krishnankoil, July 07-14, 2010.
22. National Conference on Theoretical Computer Science and Discrete Mathematics at Kalasalingam University, Krishnankoil, January 09-11, 2012
23. 23rd International Workshop on Combinatorial Algorithms at Kalasalingam University, Krishnankoil, July 19-21, 2012.
24. DST Sponsored Instructional Workshop on Domination in Graphs at Kalasalingam University, Krishnankoil 27th January -1st February, 2014
25. DST Sponsored Instructional Workshop on Graph Labeling Problems at Kalasalingam University, Krishnankoil February 5-11, 2014
26. DST Sponsored Instructional Workshop on Graph Theory and its Applications to Visual Cryptography at Kalasalingam University, Krishnankoil March 10-15, 2014
27. Eighth International Workshop on Graph Labelings (IWOGL 2014) at Kalasalingam University, Krishnankoil December 03-06, 2014

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145. S. Arumugam, Dalibor Froncek and N. Kamatchi, Distance Magic Graphs – A Survey, *J. Indones. Math. Soc.*, Special Edition (2011), 11-26.
146. S. Arumugam, Metric Dimension in Graphs – A Brief Survey, *Mathematical and Computational Models*, Eds. R. Nadarajan, R.S. Lekshmi and G. Sai Sundara Krishnan, Narosa Publishing House, New Delhi, (2012), 318-325.
147. S. Arumugam and K. Raja Chandrasekar, Minimal dominating sets in maximum domatic partitions, *Australasian Journal of Combinatorics*, **52** (2012), 281-292.
148. S. Arumugam and Varughese Mathew, The Fractional Metric Dimension of Graphs, *Discrete Math.*, **312**(9) (2012), 1584-1590.
149. S. Arumugam and M. Nalliah, Super (a,d) -edge antimagic total labelings of friendship graphs, *Australasian Journal of Combinatorics*, **53** (2012), 237–243.
150. S. Arumugam, Varughese Mathew and K. Karuppasamy, Fractional Distance Domination in Graphs, *Discussiones Mathematicae Graph Theory*, **32** (2012), 449–459
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153. S. Arumugam and K. Raja Chandrasekar, A note on graphs with open irratic number two, *Bulletin of ICA*, **65** (2012), 27-32.
154. S. Arumugam and N. Kamatchi, On (a, d) -distance antimagic graphs, *Australasian Journal of Combinatorics*, **54** (2012), 279-287.
155. S. Arumugam, Jay Bagga and K. Raja Chandrasekar, On Dominator Colorings in Graphs, *Proceedings Mathematical Sciences*, **122**(4) (2012), 561-571.
156. S. Arumugam and K. Raja Chandrasekar, On Chromatic Transversal Domination in Graphs, *J. Combin. Math. Combin. Comput.*, **83** (2012), 13-21.
157. S. Arumugam and Sithara Jerry, The Convexity Graph of Minimal Total Dominating Functions of a Graph, *Kragujevac J. Math.* **36** (1) (2012), 119-131.
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159. N. Kamatchi and S. Arumugam, Distance antimagic graphs, *J. Combin. Math. Combin. Comput.*, **84** (2013), 61-67.
160. R. Lakshmanan, S. Arumugam and Atulya K. Nagar, Visual cryptography scheme for the mindom access structure of a graph, *J. Combin. Math. Combin. Comput.*, **84** (2013), 69-80.
161. M. Nalliah and S. Arumugam, Super (a,d) -edge-antimagic total labelings of generalized friendship graphs, *J. Combin. Math. Combin. Comput.*, **84** (2013), 81-90.
162. S. Arumugam, R. Lakshmanan, and Atulya K. Nagar, Graph Access Structures With Optimal Pixel Expansion Three, *Inform. and Comput.*, **230** (2013), 67–75.
163. S. Arumugam, Mustapha Chellali, and Teresa W. Haynes, Equivalence Domination in Graphs, *Quaestiones Mathematicae*, **36** (2013), 331-340.
164. S. Arumugam and M. Sundarakannan, Equivalence Dominating Sets in Graphs, *Utilitas Mathematica*, **91** (2013), 231-242.
165. S. Arumugam, Karam ebadi and L. Sathikala, Twin Domination and Twin Irredundance in Digraphs, *Applicable Analysis and Discrete Mathematics*, **7** (2013), 275-284.
166. S. Arumugam, R. Lakshmanan and Atulya K. Nagar, Visual cryptography scheme for graphs with vertex covering number two, *Natl. Acad. Sci. Lett.*, **36**(6) (2013), 575–579.
167. S. Arumugam, Varughese Mathew and Jian Shen, On Fractional Metric Dimension of Graphs, *Discrete Mathematics, Algorithms and Applications*, **5** (4) (2013), 1350037 (8 pages)
168. S. Arumugam, Bibin K. Jose, Csilla Bujtas and Zsolt Tuza, Equality of Domination and Transversal Numbers in Hypergraphs, *Discrete Applied Mathematics*, **161** (2013), 1859-1867.

169. S. Arumugam, Martin Baca, Dalibor Froncek, Joe Ryan, Kiki A. Sugeng, Some open problems on graph labelings, *AKCE Int. J. Graphs Comb.*, **10**(2) (2013), 237-243.
170. Neil Buckley, Atulya K. Nagar and S. Arumugam, Evolution of Visual Cryptography Basis Matrices with Binary Chromosomes, 2013 8th EUROSIM Congress on Modelling and Simulation (EUROSIM), IEEE Computer Society, (2013), 7-12.
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172. S. Arumugam, Mirka Miller, Oudone Phanalasy and Joe Ryan, Antimagic Labeling of Generalized Pyramid Graphs, *Acta Mathematica Sinica, English Series*, **30**(2) (2014), 283-290.
173. S. Arumugam, D. Haughton, B. Vasanthi, C. Zhang, Reciprocity in social networks - A case study in Tamil Nadu, India, *CS-BIGS*, **5**(2) (2014), 126-131.
174. S. Arumugam, N. Kamatchi and G.R. Vijayakumar, On the uniqueness of D -vertex magic constant, *Discussiones Mathematicae Graph Theory*, **34** (2014), 279-286.
175. Neil Buckley, Atulya K. Nagar and S. Arumugam, Key-Based Steganographic Textual Secret Sharing for Confidential Messaging, In M. Pant et. Al (eds.) Proceedings of the Third International Conference on Soft Computing for Problem Solving, *Advances in Intelligent Systems and Computing*, Springer **258** (2014), 25-34.
176. Neil Buckley, Atulya K. Nagar and S. Arumugam, AnimVSS: Frame-Based Visual Secret Sharing, In M. Pant et. Al (eds.) Proceedings of the Third International Conference on Soft Computing for Problem Solving, *Advances in Intelligent Systems and Computing*, Springer **258** (2014), 35-44.
177. S. Arumugam, R. Lakshmanan and Atulya K. Nagar, On $(k,n)^*$ -Visual Cryptography Scheme, *Des. Codes Cryptogr.*, **71** (1) (2014), 153-162.
178. S. Arumugam, Karam Ebadi and Martin Manrique, Co-Secure and Secure Domination in Graphs, *Util. Math.*, **94** (2014), 167-182.
179. Neil Buckley, Atulya K. Nagar and S. Arumugam, Visual Secret Sharing between Remote Participants, *International Journal of Computer Applications*, **103**(2) (2014), 8-17.
180. S. Arumugam, D. Haughton, B. Vasanthi and C. Zhang, A comparative study of reciprocity in two rural social networks in Tamil Nadu, India. *CS-BIGS*, **6**(1) (2015), 37-46.
181. S. Arumugam and M. Sundarakannan, On Equality in an Upper Bound for the Equivalence domination Number, *Quaestiones Mathematicae*, **38**(1) (2015), 63-71.
182. Martin Manrique and S. Arumugam, Vertex and Edge Dimension of Hypergraphs, *Graphs and Combinatorics*, **31**(2015), 183-200.

183. S. Arumugam, Karam Ebadi and Martin Manrique, Co-Roman Domination in Graphs, *Proceedings Mathematical Sciences*, **125**(1) (2015), 1-10.
184. J. Bagga, L. Pauline Fotso, P. Biatch Max and S. Arumugam, New Classes of Graceful Unicyclic Graphs, *Electronic Notes in Discrete Mathematics*, **48** (2015), 27-32.
185. M. Balakrishnan, G. Marimuthu and S. Arumugam, Vertex In-magic Arc Labelings of Digraphs, *Electronic Notes in Discrete Mathematics*, **48** (2015), 33-39.
186. Jessica Pereira, T. Singh and S. Arumugam, On (k,d) -Skolem Graceful Graphs, *Electronic Notes in Discrete Mathematics*, **48** (2015), 81-88.
187. S. Arumugam and M. Nalliah, Super (a,d) -Edge antimagic total labeling of Friendship and generalized Friendship Graphs, *Electronic Notes in Discrete Mathematics*, **48** (2015), 103-110.
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189. N. Kamatchi, A. Ramalakshmi, S. Nilavarasi and S. Arumugam, A note on Distance Magic and Distance antimagic graphs, *Electronic Notes in Discrete Mathematics*, **48** (2015), 183-187.
190. A. Godingo, T. Singh and S. Arumugam, On S-magic Graphs, *Electronic Notes in Discrete Mathematics*, **48** (2015), 267-273.
191. Jessica Pereira, T. Singh and S. Arumugam, A new measure for gracefulness of graphs, *Electronic Notes in Discrete Mathematics*, **48** (2015), 275-280.
192. B. Vasanthi, S. Arumugam, Atulya K. Nagar and Sovan Mitra, Applications of Signed Graphs to Portfolio Turnover Analysis, *Procedia-Social and Behavioral Sciences*, **211**(2015), 1203-1209.
193. P. Jeya Bala Chitra and S. Arumugam, Resolving Sets without Isolated vertices, *Procedia Computer Science* **74** (2015), 38 – 42
194. S. Arumugam, B. Jayaram and K. Thulasiraman, Independent Dominator Sequence Number of a Graph, *Procedia Computer Science* **74** (2015), 43 – 46
195. S. Arumugam and J. Saral, Identification of Bottleneck Elements in Cellular Manufacturing Problem, *Procedia Computer Science*, **74** (2015), 181 – 185.
196. S. Arumugam, S.T. Hedetniemi, S.M. Hedetniemi, L. Sathikala and S. Sudha, The Covering Chain of a Graph, *Utilitas Math.*, **98** (2015), 183-196.
197. S. Arumugam, N. Kamatchi and P. Kovar, Distance Magic Graphs, *Utilitas Math.*, **99** (2016), 131-142.
198. S. Arumugam, Kiran Bhutani and L. Sathikala, On (r,s) -fuzzy Domination in Fuzzy Graphs, *New Mathematics and Natural Computation*, **12**(1) (2016), 1-10.
199. Neil Buckley, Atulya K Nagar and S. Arumugam, On Real-valued Visual Cryptographic Basis Matrices, *Journal of Universal Computer Science*, **21**(12) (2015), 1536-1562.

200. Jessica Pereira, T. Singh and S. Arumugam, m-Gracefulness of Graphs, Algorithms and Discrete Applied Mathematics, In CALDAM 2016, S. Govindarajan and A. Maheshwari (Eds.), *Lecture Notes in Comput. Sci.*, **9602** (2016), 289-298.
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202. Neil Buckley, Atulya K. Nagar and S. Arumugam, On the use of secret sharing as a secure cipher, Special issue on Innovations in Systems and Software Engineering: A NASA Journal, DOI 10.1007/s11334-016-0273-y.
203. S. Arumugam and R. Anantha Kumar, Distance Similar Sets in Graphs, *Utilitas Math.*, (Accepted)
204. S. Arumugam and M. Nalliah, Super $(a, 3)$ -edge-antimagic total labeling for union of two stars, *Utilitas Math.*, (Accepted)
205. B. Vasanthi, S. Arumugam, and S.V. Nayana, Personal Sharing in Small Groups- A Case Study, *Procedia-Social and Behavioral Sciences* (Accepted)
206. Neil Buckley, Atulya K. Nagar and S. Arumugam, On Real-valued Visual Cryptographic Basis Matrices, *Journal of Universal Computer Science* (Accepted)
207. S.V. Divya Rashmi, A. Somasundram and S. Arumugam, Upper Secure Domination in Graphs, *Electronic Notes in Discrete Mathematics* (Accepted)
208. S. Arumugam, Purnima Gupta and Rajesh Singh, Bounds on Graphoidal Length of a Graph, *Electronic Notes in Discrete Mathematics* (Accepted)
209. S. Arumugam, J. Saral and A. Somasundaram, Minimizing the Number of Exceptional Edges in Cellular Manufacturing Problem, *Electronic Notes in Discrete Mathematics* (Accepted)
210. M. Indumathy, S. Arumugam, Veeky Baths and T. Singh, Graph Theoretic Concepts in the Study of Biological Networks, *Applied Analysis with Applications in Biological and Physical Sciences*, Springer (Accepted)
211. S. Arumugam, J. Saral and Ashwin Ganesan, Decomposition of Bipartite Graphs Arising in Cellular Manufacturing Systems, *Int. J. Advance. Soft Comput. Appl.*, (Accepted)
212. R. Kanniga Devi, K. Vimala Devi, and S. Arumugam, Dynamic Batch Mode Cost-efficient Independent Task Scheduling Scheme in Cloud Computing, *Int. J. Advance. Soft Comput. Appl.*, (Accepted)
213. S. Arumugam, S. Sriram, D. Ranganayakulu, Ibrahim Venkat and K.G. Subramanian, Eccentric Digraphs of Tournaments, *Int. J. Advance. Soft Comput. Appl.*, (Accepted)
214. S.V. Divya Rashmi, S. Arumugam, and Ibrahim Venkat, Secure Domination and Secure Irredundance in Graphs, *Int. J. Advance. Soft Comput. Appl.*, (Accepted)

LIST OF BOOKS PUBLISHED

1. Modern Algebra.
2. Modern Analysis.
3. Sequences and Series.
4. Calculus Vol.1.
5. Calculus Vol.2.
6. Analytical Geometry.
7. Differential Equations and Its Applications.
8. Set Theory, Number System and Theory of Equations.
9. Statistics.
10. Complex Analysis.
11. Ancillary Mathematics (four volumes).
12. Analytical Geometry 3D and Vector Calculus.
13. Trigonometry and Fourier Series.
14. Invitation to Graph Theory.
15. Engineering Mathematics Vol.1.
16. Engineering Mathematics Vol.2.
17. Engineering Mathematics Vol.3.
18. Numerical Methods.
19. Two Tamil Medium text books on Graph Theory and Programming in C respectively.
20. Handbook of Graph Theory, Combinatorial Optimization, and Algorithms, CRC Press

Most of these books are prescribed as text books by the Boards of Studies for the undergraduate courses in various universities and autonomous colleges throughout Tamil Nadu and are widely used by the students and teachers.

LIST OF EDITED PROCEEDINGS

1. Graph Theory and its Applications (Edited Proceedings of National Workshop) Tata – McGraw Hill (1997).
2. Graphs, Combinatorics, Algorithms and Applications (Edited Proceeding of National Conference held at Arulmigu Kalasalingam College of Engineering, Krishnankoil) Narosa Publishing House (2004).
3. Labelings of Discrete Structures and Applications (Edited Proceedings of the Group Discussion held at Mary Matha Arts and Science College, Mananthavady) Narosa Publishing House (2008).
4. Domination in Discrete Structures and Applications (Edited Proceedings of the Group Discussion held at E.M.G. Yadava Women's College, Madurai) Special Issue of AKCE International Journal of Graphs and Combinatorics Volume 4 No. 2 (2007)
5. Graph Labelings (Edited Proceedings of the Fifth International Workshop on Graph Labelings held at Kalasalingam University, Krishnankoil) Special Issue of AKCE International Journal of Graphs and Combinatorics Volume 6 No. 1(2009).
6. Edited the Proceedings of the International Conference on Recent Developments in Combinatorics and Graph Theory held at Kalasalingam University, Krishnankoil which has been published as a Special Issue of Journal of Combinatorial Mathematics and Combinatorial Computing (JCMCC) Volume No. 69 (2009).

7. Edited the Proceedings of the International Workshop on Combinatorial Algorithms (IWOCA 2012) held at Kalasalingam University, Krishnankoil which has been published as Springer Verlag Lecture Notes in Computer Science, Volume No. 7643 (2012).
8. Edited the Proceedings of the National Conference on Theoretical Computer Science and Discrete Mathematics (NCTCSDM 2012) held at Kalasalingam University, Krishnankoil which has been published as a Special Issue of Journal of Combinatorial Mathematics and Combinatorial Computing (JCMCC) Volume No. 84 (2013).

Research Guidance

S. No.	Name of the Candidate	Title of the Thesis	University	Year of awarding Ph.D Degree
1.	C.Pakkiam	Studies in Graph Theory Graphoidal covers in graphs, digraphs and hypergraphs	Madurai Kamaraj University	1991
2.	J.Paulraj Joseph	Studies in Graph Theory Domination related topics	Madurai Kamaraj University	1994
3.	K.A. Germina	Studies in Graph Theory – Graceful, Harmonious, Strongly graceful and Arithmetic graphs	Manonmaniam Sundaranar University	1995
4.	Subbulakshmi S. Rajan	Studies in Graph Theory-Degree sequences in graphs, digraphs and hypergraphs	Madurai Kamaraj University	1996
5.	S.Josephine Jeyarani	Studies in Graph Theory- Graph labeling problems	Manonmaniam Sundaranar University	1997
6.	J. Suresh Suseela	Studies in Graph Theory- Graphoidal covers and path covers in graphs and digraphs	Manonmaniam Sundaranar University	1997
7.	A. ThuraiSwamy	Studies in Graph Theory- Domination in Graphs	Madurai Kamaraj University	1998
8.	S. Velammal	Studies in Graph Theory- Covering, independence, domination and related topics	Manonmaniam Sundaranar University	1999
9.	R.Kala	Studies in Graph Theory	Manonmaniam Sundaranar University	1999
10.	N. Usha Devi	Some Problems in Graph Theory and Combinatorics- Labelings, hereditary properties of graphs & posets	Madurai Kamaraj University	1999
11.	S. Meena	Studies in Graph Theory- Factorizations and decompositions of graphs	Manonmaniam Sundaranar University	1999
12.	A.P. Santhakumaran	Central Concepts in Graphs	Manonmaniam Sundaranar University	2001
13.	J. Suresh Kumar	Studies in Graph Theory- Pseudocomplete colorings and Graphoidal colorings of a graph	Manonmaniam Sundaranar University	2003
14.	Hepziba Jeyakumar	Studies in Graph Theory- Asteroidal sets in graphs	Manonmaniam Sundaranar University	2003

15.	K. Jacob	Studies in Graph Theory Domination parameters of a digraph	Mahatma Gandhi University	2004
16.	M. Subramanian	Studies in graph theory Independence saturation in graphs	Manonmaniam Sundaranar University	2004
17.	Reji Kumar. K	Studies in graph theory Dominating Functions in graphs	Manonmaniam Sundaranar University	2006
18	Latha Martin	Studies in Graph Theory – Graph Colouring Problems	Manonmaniam Sundaranar University	2007
19	I. Sahul Hamid	Studies in Graph Theory – Simple Graphoidal Covers in Graphs	Manonmaniam Sundaranar University	2007
20	A. Muthukamatchi	Studies in Graph Theory - Domination in graphs	Madurai Kamaraj University	2008
21	Jebarajan	Congestion Control Algorithm in Computer Communication Network	Manonmaniam Sundaranar University	2008
22	C. Sivagnanam	Studies In Graph Theory - Neighborhood Connected And Neighborhood Total Domination In Graphs	Anna University	2009
23	A. Anitha	Studies in Graph Theory Degree Equitable Coloring and Equitable Domination in graphs	Anna University	2009
24	Sithara Jerry	Domination Related Functions in Graphs	Anna University	2009
25	K. Karuppasamy	Studies in Fractional Graph Theory	Mahatma Gandhi University	2010
26	S. Sudha	Min-Max and Max-Min Parameters for Domination, Independence and Irredundance	Kalasalingam University	2010
27	M. Sundarakannan	Equivalence Domination in Graphs	Kalasalingam University	2011
28	Varughese Mathew	Studies in Graph Theory-Rational Approach	Mahatma Gandhi University	2011
29	Bibin K. Jose	Domination in Hypergraphs	Mahatma Gandhi University	2012
30	K. Raja Chandrasekar	Studies in Graph Theory –Coloring and Domination in Graphs	Kalasalingam University	2012
31	N. Kamatchi	Distance Magic and Distance Antimagic Labelings of Graphs	Kalasalingam University	2013
32	S. Sabeen	Association rule mining using directed graphs and hypergraphs	Anna University	2013
33	M. Nalliah	Antimagic labelings of graphs and digraphs	Kalasalingam University	2014
34	R. Lakshmanan	Studies in visual cryptography scheme	Kalasalingam University	2014
35	R. Anantha Kumar	Studies in graph theory - distance related concepts in graphs	Kalasalingam University	2014
36	S. Nirmala Kumari	Studies in Graph Theory Domination Related problems	Mahatma Gandhi University	2016
37	L. Sathikala	Inequality Chains of Graph Parameters	Kalasalingam University	2016

38	Neil Buckley	New Methods for Robust Visual and Textual Secret Sharing	Liverpool Hope University	2016
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RESEARCH GUIDANCE (CO-GUIDE)

1.	R. Balakrishnan	Abstract Algebra-Rings, Near Rings and Near Fields	Manonmaniam Sundaranar University	1999
2.	C. Karthikeyan	Studies in Theory of Topological Near Rings	Manonmaniam Sundaranar University	2000
3.	R.M. Suresh	Fuzzy Techniques in Pattern Recognition Problems	Manonmaniam Sundaranar University	2001
4.	N. Krishnan	Image Processing- Design Aspects: Development and Application for an Image Processing Based Design model – xpertx-in the Design of Indian Cultural Art silk sarees	Manonmaniam Sundaranar University	2002
5.	V. Joseph Raj	A new approach to Neural Network Architecture	Manonmaniam Sundaranar University	2004
6.	G. Suganthi	Design and Analysis of Parallel algorithm for generalized matching problem on graphs.	Manonmaniam Sundaranar University	2004
7.	S. Arivazhagan	Some Studies on Texture Image Analysis using wavelet transform and its usage in few industrial applications	Manonmaniam Sundaranar University	2005
8	S. P. Victor	Design and Analysis of Parallel Algorithms to Find the Central Structures of Graphs Useful in the Network Design	Manonmaniam Sundaranar University	2005
9.	M. Germanus Alex	Classification and Analysis of Oceanographic Images	Manonmaniam Sundaranar University	2006
10.	S. Monikandan	Graph Theory Problems Related to ULAM's Conjecture	Manonmaniam Sundaranar University	2006
11.	K. Muneeswaran	Study of Various Image Features for classification and their usage in content based image retrieval with a Medical Application	Manonmaniam Sundaranar University	2006
12	Mary Immaculate Sheela	A study on integration and fusion algorithm for optimal sensor system	Manonmaniam Sundaranar University	2008
13	K.G. Srinivasagan	Some Studies on Recognition of Handwritten Tamil Characters and Applications	Manonmaniam Sundaranar University	2009

14	B. Sankaragomathi	Image Compression Using Fractals for color and textured images	Manonmaniam Sundaranar University	2010
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WORK IN PROGRESS

- i. Preparing a Research level monograph on Path Covers in Graphs and Applications (jointly with Purnima Gupta).
- ii. Preparing a Research level monograph on Graceful Labelings (jointly with Jay Bagga and J. Gallian).
- iii. Preparing a Research level monograph on Metric Dimension in Graphs to be published under Springer Brief.

Visits Abroad

1. Western Michigan University, Kalamazoo, USA. Attended the Ninth Quadrennial International conference on Graph Theory, Combinatorics, Algorithms and Applications, June 4-9, 2000. Gave a talk on "A Generalisation of Edge Chromatic number using acyclic graphoidal covers".
2. Visited the University of Milwaukee, USA and had interaction with Rev. Fr. Albert William during June 11-12, 2000.
3. Visited Academy of Tamil Arts and Technology, Scarborough, Canada, August 26, 2002 to September 8, 2002 for conducting the semester examination for B.A (Tamil) Degree, conducted by Manonmaniam Sundaranar University in Collaboration with the Academy.
4. Visited Carleton University, Ottawa, Canada during September 10-13, 2002. Gave a research seminar on Asteroidal Chromatic number of a graph on September 12, 2002, Had interaction with Dr. Brett Stevens.
5. Visited the Department of Computer Science, University of Toronto, Toronto, Canada on September 20, 2002. Attended two research seminars; Interacted with Prof. D.G. Corneil.
6. Visited the Department of Mathematics, University of Waterloo, Canada during September 23-24, 2002. Had discussions with Prof. PL. Kannappan, Prof. H. Younger and Prof. U S R Murthy.
7. Visited University of Exeter, Exeter, UK during September 30, October 1 and October 4 to 7, 2002. Had discussions with Dr. R.P. Burn.
8. Visited the Department of Mathematics, University of Nottingham, Nottingham UK during October 2-3, 2002. Interacted with Prof. Douglas R. Woodall; Gave a Research Seminar on "Asteroidal sets and Asteroidal Chromatic Number of a Graph".
9. Visited University of Queensland, Brisbane, Australia, Attended the 30th Australasian Conference on Combinatorial Mathematics and Combinatorial

- Computing, December 5-9, 2005 and gave a talk on "Simple Path Covers in a Graph"
10. Visited the Institute of Mathematical Sciences, University of Malaya, Kula Lumpur during December 10 -13, 2005 and gave two invited talks on "Simple Path Covers in a Graph" and "Domination Related Functions in Graphs" on December 12, 2005.
 11. Visited Texas A&M University, USA and had interaction with Prof. Suresh D. Pillai, during September 16-17, 2007.
 12. Visited University of Oklahoma, USA and had interaction with Prof. Krishnaiyan Thulasiraman, during September 17-19, 2007.
 13. Visited East Tennessee State University, Tennessee, USA and had interaction with Prof. T.W. Haynes, during September 19-22, 2007.
 14. Visited Ball State University, USA and had interaction with Prof. Jay Bagga, during September 23-25, 2007.
 15. Visited Rochester Institute of Technology, Rochester, New York and had interaction with Prof. Robert D. Borden, during September 25-26, 2007.
 16. Visited Royal Holloway University of London and had interaction with Prof. Peter Wild, during September 27-29, 2007.
 17. Visited National University of Singapore during January 2-5, 2008 and gave an invited talk on "Domination Chain and fractional Parameters" and had interaction with Prof. K.M. Koh.
 18. Visited Harbin Engineering University, Harbin, China: Attended the 4th International Workshop on Graph Labelings , January 6-10, 2008 and gave an invited talk on "Graph Labelings and Embedding Problems" .
 19. Visited Charles University, Prague, Czech Republic during June 22-24, 2009, interacted with Prof. Jan Kratochvil and delivered guest lecture on Fractional Coloring and Fractional Domination in Graphs
 20. Visited V.S.B. Technical University of Ostrava, Ostrava, Czech Republic during June 25-27, 2009, interacted with Prof. Dalibor Froncek, Petr. Kovar and M. Kuberha and delivered guest lecture on MAX-MIN and MIN-MAX Graph Saturation parameters.
 21. Participated in the 20th International Workshop on Combinatorial Algorithms (IWCA 2009) at Hradec Nad Moravici, Czech Republic during June 28- July 2, 2009 and gave a talk on Equitable Domination in Graphs. He has also submitted the proposal for organizing this workshop at Kalasalingam University in 2012.
 22. Participated in the 22nd British Combinatorial Conference (BCC 2009) at University of St. Andrews, St. Andrews, Scotland, UK during July 5-10, 2009 and delivered a talk on Maximal Independent sets in Minimum Colorings.
 23. Participated in the India-Taiwan Conference on Discrete Mathematics at National Taiwan University, Taipei , Taiwan during November 9-12, 2009 and delivered a talk on Component-Complete Sets in Graphs.

24. Participated in the International Workshop on Combinatorial Algorithms (IWOCA 2010) at King's College, London during July 26-28, 2010 and gave a presentation about IWOCA 2012 to be organized at Kalasalingam University.
25. Visited Liverpool Hope University, Liverpool, UK during July 29-30, 2010 interacted with Prof. Atulya Nagar regarding research collaboration and delivered a talk on "Applications of Graph Theory to Visual Cryptography".
26. Participated in the in the Workshop on Cycles and Colourings 2010 at High Tatras, Slovakia during September 05 - 10, 2010 and delivered an invited talk on The Cycle Spectrum of a Graph.
27. Participated in the Sixth Cracow Conference on Graph Theory held at Zgorzelisko, Poland during September 12-17, 2010 and presented a paper entitled Dominator Colorings in Graphs.
28. Visited Ball State University, USA during September 17-October 2, 2010, interacted with several professors in the department of computer science, mathematics and business school. Delivered several guest lectures during this period.
29. Visited Indiana University- Purdue University Fort Wayne (IPFW), USA on September 24, 2010, interacted with Prof. Lowell W. Beineke and delivered a talk on *Distance Magic Graphs*
30. Visited Wright state University, Dayton, USA on October 1, 2010, interacted with Prof. K.T. Arasu and delivered a talk on Dominator Colorings in Graphs in the Department of Mathematics.
31. Visited City College of New York, USA during October 4-6, 2010 interacted with Prof. K. Ravindran, Prof. S. Burr, Dr. Sergel N. Artemov and Dr. Ted Brown and delivered a talk on Applications of Graph Theory to Visual Cryptography.
32. Visited Clemson University, Clemson, USA during October 7-9, 2010 and interacted with Prof. S.T. Hedetniemi, Prof. S.M. Hedetniemi, Prof. Wayne Goddard and Prof. Ranu Laskar. Delivered an Invited talk on Some New Research Directions in Domination in the 25th Clemson Mini-Conference on Discrete Mathematics and Algorithms.
33. Visited East Tennessee State University, Johnson City, USA during October 11-14, 2010, interacted with Prof. T.W. Haynes and Prof. Yared Nigusse and delivered a talk on Distance Magic Graphs.
34. Visited Texas State University, San Marcos, USA on October 15, 2010, interacted with Dr. Daniello Ferraro, Dr. Nathaniel Dien and Dr. Jian Shen and delivered a talk on Fractional Metric Dimension of a graph.
35. Visited University of Oklahoma, Norman during October 16-19, 2010 and had interaction with Prof. K. Thulasiraman and Prof. Lakshmi Varahan.
36. Visited University of Minnesota, Duluth, USA during October 20-22, 2010, interacted with Prof. Dalibor Froncek and Prof. Joseph Gallian. Delivered Keynote address on Distance Magic Labellings in Graphs in the Sixth International Workshop on Graph Labellings (IWOGLE2010).

37. Participated in the fiftieth Midwest Graph Theory Conference (MIGHTY L) at the University of Wisconsin – Superior, USA on October 23, 2010 and presented a paper on Dominator Colorings in Graphs.
38. Visited Liverpool Hope University, Liverpool, UK during May 3 -25, 2011 under the project Centre for Applicable Mathematics and Systems Science (CAMSS) for research collaboration.
39. Participated in the International Workshop on Combinatorial Algorithms (IWOCA 2011) at University of Victoria, Canada during June 18-26, 2011 and gave a presentation about IWOCA 2012 to be organized at Kalasalingam University. He also presented a paper entitled “Algorithmic Aspects of Dominator Colorings” and had interaction with Prof. Gary MacGillivray for future collaboration.
40. Visited British University in Dubai on 14-11-2011 and delivered an Open Lecture on “Visual Cryptography Scheme- A Brief Survey”.
41. Participated in the 7th International Workshop on Graph Labeling (IWOGL 2012) at University of Indonesia, Indonesia during July 23-25, 2012 and gave a talk on “Distance Magic and Distance Antimagic Graphs”.
42. Participated in the International Workshop on Optimal Network Topologies (IWONT 2012) at Institut Teknologi Bandung (ITB), Bandung, Indonesia during July 27-29, 2012 and gave a talk on “Dominator Sequences in Bipartite Graphs”.
43. Visited Liverpool Hope University, Liverpool, UK during 20th September -13th October, 2012 as a Visiting Professor and for research collaboration and delivered around 10 lectures to the undergraduate students of Liverpool Hope University on Foundations of Mathematics.
44. Visited University of Leicester during September 27-29, 2012 and delivered an invited talk in the mini-symposium on Graph Theory held in the Department of Computer Science on 28th September 2012.
45. Delivered an invited talk on Applications of Graph Theory to Social Networks in the research seminar programme of Liverpool Hope University on 10th October 2012.
46. Visited the Caledonian Business School at Glasgow Caledonian University (GCU), London on 3rd October 2012 and had academic discussions with Dr. Sovan Mitra.
47. Visited University of Salford, Manchester on 12th October 2012 and interacted with Prof. Terrence Fernando for possible research collaboration.
48. Visited Universitas Gadjah Mada, Yogyakarta-Indonesia during November 6-7, 2013 and delivered a keynote address on Protection of Graphs in 2nd IndoMs International Conference on Mathematics and its Applications (IICMA 2013)
49. Visited Department of Applied Mathematics, Tunghai University, Taichung Taiwan during November 16-17, 2013 and delivered three lectures in the workshop on Graph Theory and Interconnection Network. Interacted with Dr. Tao-Ming Wang for research collaboration.

50. Visited Department of Applied Mathematics, National Chia Tung University, Hsinchu, Taiwan during November 19-22, 2013 and delivered an invited talk in the 3rd India-Taiwan Conference on Discrete Mathematics.
51. Visited National Tsing Hua University, Hsinchu, Taiwan had a discussion with Prof. Da Hsuan Feng, Senior Vice President (Global Strategy, Planning and Evaluation) regarding the possibility of signing MoU on 20th November 2013.
52. Visited Department of Mathematics, University Sains Malaysia, Malaysia during May 11-13, 2015 and delivered five Invited talk on "Domination in Graphs" in the Two-day Course on Graph Algorithms and its Industrial Applications - Tutorial and Case studies at Department of Mathematics, University Sains Malaysia, Malaysia during May 11-12, 2015. Also delivered keynote address on "Graph Coloring Problems" in the International Workshop on Graph Algorithms (IWGA 2015) at Department of Mathematics, University Sains Malaysia, Malaysia on 13th May 2015.
53. Visited Yazd University, Iran during 25-28 August 2015 and delivered an Invited talk on "Biological Networks" in the in the 46th Annual Iranian Mathematics Conference (AIMC2015).
54. Presented a Paper entitled "Applications of Signed Graphs to Portfolio Turnover Analysis" in the 2nd Global Conference on Business and Social Science held at ASTON Denpasar Hotel and Convention Centre Bali, Indonesia during Sep 17-18, 2015
55. Visited Institut Teknologi Bandung, Indonesia during Sep 21-23, 2015 and delivered an invited talk on "Local Antimagic Chromatic Number of a Graph" in the International Conference on Graph Theory and Information Security.
56. Visited Universitas Jember, Jember, East Java, Indonesia during Sep 25-26, 2015 and delivered an invited talk on "Distance Magic Labelings in Graphs" in the Graph Master Workshop.
57. Visited Hasanuddin University, Makassar, South Sulawesi, Indonesia during 28th Sep-6th Oct 2015 and delivered three invited talks on Labelings, Domination and Social Networks in the SEAMS School on Coding and Graphs. Also delivered an invited talk on "Ethics in Research Publications" in the Workshop for Writing Computer-science-related Articles In International publication on 29th Sep 2015.
58. Visited Hasanuddin University, Makassar, South Sulawesi, Indonesia during 28th Sep-6th Oct 2015 and delivered an invited talk on "Visual Cryptography" in the International Conference on Mathematics, Statistics, Computer Science, Mathematics Education (ICMSCSME) on 2nd Oct 2015.
59. Presented a Paper entitled "Personal Sharing in Small Groups-A Case Study" in the 3rd Global Conference on Business and Social Science held at Hotel Nexus, Kuala Lumpur during December 16-17, 2015.

University Administrative Experience

1. Served as Registrar-in-charge of Manonmaniam Sundaranar University for about four months.

2. Served as Controller of Examinations-in-charge of Manonmaniam Sundaranar University from January 2000 for one year.
3. Syndicate member of Manonmaniam Sundaranar University from January 18, 2000 to January 17, 2003.
4. Served as member of Conveners Committee.
5. Dean-in-charge, College Development from July 2002 to July 2003.
6. Director (R&D) at Kalasalingam University from January 2007 to September 2009

Awards/Honors Received

1. Vocational Excellence Award for 30 years of dedicated and Exemplary research oriented teaching in Mathematics by Rotary Club of Tirunelveli West on March 11, 2003.
2. Prof. S. Arumugam Endowment for Rs. 1 Lakh has been created by my students at Manonmaniam Sundaranar University, Tirunelveli on 5th August, 2004 and Prof. S. Arumugam endowment lecture is conducted every year.
3. President of Academy of Discrete Mathematics and Applications from June 2008 for a period of two years.
4. Conjoint Professor, School of Electrical Engineering and Computer Science The University of Newcastle, NSW 2308, Australia for a period of three years from 18th September 2009
5. Awarded Fellow of The Institute of Combinatorics and Applications (FTICA) by the Institute of Combinatorics and Applications, Canada
6. Adjunct Professor, Department of Computer Science, Ball State University, Muncie, Indiana 47306, USA for a period of three years starting from March 2012.
7. Visiting Professor, Department of Computer Science, Liverpool Hope University, Liverpool, UK for a period of two years starting from January 2012.
8. Under the Mathematics Genealogy Project steps have been taken towards ranking Discrete Mathematicians on the basis of Number of PhD students and PhD descendants. Prof. S. Arumugam is having second rank in this list. The first rank is occupied by Prof. Bela Bollobas from USA.
9. Experts from USA, South Africa and Finland are engaged in identifying Founders of Graph Theory (Country Wise). In the tentative list Prof. S. Arumugam is included as a Founder of Graph Theory in India.
10. Prof. S. Arumugam has been nominated as a member of the editorial board of the International Journal of Mathematics and Statistics, published from China.
11. Prof. S. Arumugam has been nominated as a member of the editorial board of the Communications in Combinatorics and Optimization, published from Iran.
12. Prof. S. Arumugam has been nominated as a reviewer of Zentral blatt Math, Germany (Springer).
13. Prof. S. Arumugam has been nominated as Adjunct Professor at Bits-Pilani, Goa Campus from August 2015.

14. Prof. S. Arumugam has been nominated as a Co-opted Member of Project Advisory Committee (Mathematical Sciences) at DST, New Delhi from September 2015 for a period of three years.

PROJECTS

1. Principal investigator of the DST project on *Graphoidal Covers of a Graph and its Applications*. The total cost of the project is Rs. 6.33 lakhs. (completed).
2. Co-Investigator for the DST Project on *Reconstruction of Graphs and Digraphs (Degree Pair Associated)*. The total cost of the project is Rs. 9,52,164. (completed)
3. Principal investigator of the NBHM project on *Decomposition of Graphs into paths and cycles*. The total cost of the project is Rs. 6.98 lakhs. (Completed)
4. Principal investigator of the DST project on *Domination Related Functions in Graphs*. The total cost of the project is Rs. 16, 60, 400/-. (Completed)
5. Principal Investigator of the NBHM project on *Domination in Graphs – Theory, Algorithms and Applications*. The total cost of the project is Rs. 835150/- (Completed).
6. Coordinator of the *n*-CARDMATH Core Group Research Facility (CGRF) Sponsored by Department of Science and Technology, Govt. of India, New Delhi. The total cost of the project is Rs. 2,11,21,600 /- (Completed)

***n*-CARDMATH (National Centre for Advanced Research in Discrete Mathematics)**

With a view to promoting research, development and advanced training in Discrete Mathematics, Department of Science and Technology, Government of India, New Delhi has initiated steps towards setting up National Centre for Advanced Research in Discrete Mathematics (*n*-CARDMATH). Towards achieving this goal the Department of Science and Technology has identified a few active researchers in Discrete Mathematics throughout the country and has invited them to submit proposals for evolving and leading a CARDMATH Core project. In this connection I am one of the experts identified by DST

The DST has approved setting up *n*-CARDMATH at Kalasalingam University. Under the scheme the DST has approved 10 subproject proposals in various topics and the Principal Investigators of the project proposals are from Kalasalingam University, Krishnankoil, Manonmaniam Sundaranar University, Tirunelveli, Algappa University, Karaikudi, St. Xavier's College, Palayamkottai, Ramanujan Research Centre, Saraswathi Narayanan College, Madurai and Thiagaraja College of Engineering, Madurai. Also a Core Group Research Facility (CGRF) has been set up at Kalasalingam University and the total budget for a period of five years for CGRF is Rs. 1.6 Crores.

These subprojects under *n*-CARDMATH will be carried out under my leadership. *n*-CARDMATH was inaugurated at Kalasalingam University by His Excellency The President of India Dr. A.P.J. Abdul Kalam on 05th January 2007.

INNOVATIONS IN ACADEMIC ACTIVITY

i. RESEARCH ORIENTED LECTURE SERIES:

Manonmaniam Sundaranar University has around 50 colleges affiliated to it. With the aim of promoting research activity not only in the University department, but also in colleges affiliated to our university, the Department of Mathematics organized "Research Oriented Lecture Series in Mathematics" during 1995, 1996 and 1997. Later this programme was sponsored by Department of Science and Technology. Under this programme we conducted one-day seminars on all Second Saturdays and two hours of lectures on all other Saturdays. Several Research topics of current interest were discussed. This programme was well received by research scholars and college teachers. Motivated by this lecture series several teachers working in the Mathematics departments of various colleges in Manonmaniam Sundaranar University area have taken up research work and a few of them obtained Ph.D. Moreover, because of the research publications of these staff members, two colleges obtained the PG Development grant from UGC. This programme has now been revived for two years, namely, 2005-2007, which is being sponsored by DST, New Delhi. Under this programme we are conducting one day seminars on all second and fourth Saturdays of every month in various institutions in Madurai, Karaikudi and Tirunelveli regions.

ii. AKCE INTERNATIONAL JOURNAL OF GRAPHS AND COMBINATORICS:

Arulmigu Kalasalingam College of Engineering, Krishnankoil has launched an ambitious programme of publishing of a journal, "**AKCE International Journal of Graphs and Combinatorics**". An Editorial board consisting of leading experts in the subject from various countries has been constituted for the journal. The journal is devoted to publication of original research papers of high quality, after a strict refereeing process. All the papers appearing in this journal are indexed and reviewed in Mathematical Reviews and Zentralblatt MATH. The journal is index from SCOPUS from 2011 onwards. The first issue of the journal was released in June 2004 and **I am the Editor -in-chief of this journal**. From the year 2015 onwards the journal is to be published jointly with Elsevier.

INNOVATIONS IN ADMINISTRATION:

I have a total experience of 32 years as Head of the Department of Mathematics at St. John's College and Manonmaniam Sundaranar University. I have also served as Registrar-in-charge, Controller of Examinations-in-charge, Dean-in-charge and member of Convener Committee in the absence of the Vice-Chancellor. I was also a Syndicate Member of Manonmaniam Sundaranar University for the period of three years from January 18,

2000. Hence I am quite familiar with almost all aspects of University administration. As Controller of Examinations, I have revamped and streamlined the activities of the Examination wing. I took steps to expedite publications of examination results and the revaluation process. At present I am in the process of coordinating the research activities at Kalasalingam University as Director (Research and Development).

Social Activity

Mr. J. Paulraj Joseph was a life convict in Central Prison, Palayamkottai. He and his father were convicted in a murder case in 1983. He was then a graduate in Mathematics. I helped Mr. Paulraj Joseph to complete his M.Sc in Mathematics and I went to Central Prison, Palayamkottai to teach him the various subjects. He completed his M.Sc with a first class. Later I guided him for Ph.D in Mathematics. He did his research work on *Domination in graphs* and obtained his Ph.D in Mathematics from Madurai Kamaraj University. At present Dr. J. Paulraj Joseph is an Associate Professor in the Department of Mathematics, Manonmaniam Sundaranar University My involvement in the bringing up a Life Convict to a respectable position in Society is a matter of great mental satisfaction for me.

BRIEF ACCOUNT OF PLACES WHERE OUR WORK HAS BEEN REFERRED/CITED

Sl.No	Name of the author who has cited	Paper / Book	Year of publication	Name of the Journal/Book Publisher's Name & Address	Volume No/ Edition details	Page No
1	T.W. Haynes, S.T. Hedetniemi and P.J. Slater	Book	1998	<i>Fundamentals of Domination in graphs</i> , Marcel Dekker, New York	-	164, 166, 239, 247, 251, 253, 358 and 407
2.	T.W. Haynes, S.T. Hedetniemi and P.J. Slater	Book	1998	<i>Dominations in Graphs – Advanced Topics</i> , Marcel Dekker, New York,	-	274
3.	G. Chartand and L. Lesniak	Book	2004	<i>Graphs and Digraphs</i> , Chapman & Hall/CRC, A CRC Press company, New York	4 th Edition	282
4.	T. W. Haynes, S. T. Hedetniemi and Michael A. Henning	Paper	2004	<i>Utilitas Mathematica</i>	66	106
5.	Jean E. Dunbar, T. W. Haynes and S. T. Hedetniemi	Paper	2005	<i>Utilitas Mathematica</i>	66	196, 197
6.	B. D. Acharya and Purnima Gupta	Paper	1999	<i>Discrete Mathematics</i>	206	5

7.	Gayla S. Domke, Johannes H. Hattingh, S.T. Hedetniemi, Renu C. Laska and Lisa R. Markus	Paper	1999	<i>Discrete Mathematics</i>	203	65
8.	Xu Baogen, E.J. Cockayne, T. W. Haynes, S. T. Hedetniemi and Zhu Shangchao	Paper	2000	<i>Discrete Mathematics</i>	216	2, 8
9.	Chung-Shou Liao and Gerard J. Chang	Paper	2002	<i>Taiwanese Journal of Mathematics</i>	Vol. 6 No. 3	
10.	Joseph A. Gallian	Paper	2005	<i>The Electronic Journal of Combinatorics</i>	5	51
11.	Italo J. Dejter and Oriol Serra	Paper	2003	<i>Discrete Applied Mathematics</i>	129	319, 320
12.	Magdalena Lemansha	Paper	2004	<i>Opuscula Mathematica</i>	24/2	118, 188
13.	Italo J. Dejter	Paper	Preprint			1
14.	Fu-Hsing Wang, Yue-Li Wang and Jou-Ming Chang	Paper	2004	<i>Information Processing Letters</i>	Vol. 89(4)	
15.	Wayne Goddard, Sandra M. Hedetniemi, Stephen T. Hedetniemi	Paper	2005	<i>J. Combin. Math. Combin. Comput</i>	52	
16.	Peter Dankelmann, Gayla S. Domke, Wayne Goddard, Paul Grobler, Johannes H. Hattingh and Henda C. Swart	Paper	2004	<i>Discrete Math</i>	281	
17.	T. W. Haynes and P. J. Slater	Paper	1998	<i>Networks</i>	Vol. 32(3)	
18.	Sandi Klavzar and Alenka Lipovec	Paper	2003	<i>Discrete Mathematics</i>	Vol. 263 (1-3)	
19.	T. W. Haynes, Michael A. Henning and Lora Hopkins	Paper	2004	<i>Discrete Mathematics</i>	286	195
20.	Khee Meng Koh, Bock Boom Lim and P. J. Slater	Paper	2003	<i>Discrete Mathematics</i>	272	98
21.	Amitava Bhattacharya and Gurusamy Rengasamy Vijayakumar	Paper	2002	<i>Discussiones Mathematicae</i>	22	335
22.	G. Chartrand and P. Zhang	Book	2008	<i>Chromatic Graph Theory</i>		367
23.	Zhongfu Zhang, Jianxun Zhang and Jingwen Li	Paper	2006	<i>Taiwanese Journal of Mathematics</i>	Vol 10 No. 6	1556

OTHER INFORMATIONS

- ❖ Served as a member of the Board of Studies, Board of Examiners and Board of Question Paper Setters of various universities and autonomous colleges.
- ❖ Served as a referee for research papers in several national and international journals.