

Dr.S.ARUMUGAM

CURRICULUM VITAE

DOB July 7,1943

POSITIONS HELD

- 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) & Dean(R&D), Arulmigu Kalasalingam College of Engineering, Krishnankoil-626 126 from August 4, 2003 to till date. (AKCE has been upgraded as Kalasalingam University from November 2006)
- 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. Extended upto February 2021.
- 8. Adjunct Professor, BITS-Pilani for a period of one year starting from August 2015. Extended for one more year from August 2016.
- 9. Adjunct Professor, Adjunct Professor, Department of Mathematics, Amrita Vishwa Vidyapeetham, Coimbatore -641112 from October 2017.

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: 50

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

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

- 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 form 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 Karanataka 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.
- 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.
- 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 Barathidasan University, Trichy during October 2-4, 1994.
- Invited talk on Graph Theory and Its Applications in the Fourth Refresher Course in Mathematics at Bharathidasan University, Trichy form 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, Nagarcoil, 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.
- 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.
- 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 Sprit, 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, Kula 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 Combinatoircs, Number Theory and Geometry held at University of Mumbai, Mumbai during January 15-20, 2007.

- 162. Invited talk on *Cayley graphs, Inerconnection Networks an 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 Pratishthan, 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 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 "Dominator 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 (IWOGL2010) at the University of Minnesotta, 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 (IWOCA 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 Sruvey" 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 "Dominator 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, Combinatore 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 Bilogical 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 (ICMSCSME) 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.
- 312. Four lectures on "Connectivity in Graphs" in BITS-Pilani, K.K. Birla Goa Campus, Goa at Department of Mathematics during April 4-8, 2016
- 313. Invited talk on "Srinivasa Ramanujan" in MATH-FEST at BITS-Pilani, K.K. Birla Goa Campus, Goa at Department of Mathematics on 10th April, 2016
- 314. Invited talk on "Graph Theoretic Models in Social Networks" at Department of Mathematics, South Asia University, Delhi on 28th April 2016.
- 315. Ten Invited talks "Biological Networks and Graph Algorithms in the workshop on Introduction to Bioinformatics and Computational Biology via Graph Algorithms at School of Computer Sciences, Universiti Sains Malaysia, Penang during May 10-12, 2016.
- 316. Keynote address on "Applications of graph theory to social and biological networks" in the Global Conference on Engineering and Technology (GCOET) at KuaLa Lumpur during June 1-2, 2016.
- 317. Invited talk on "Leech Trees" in the International Conference on Discrete Mathematics (ICDM-2016) and Graph Theory Day-XII at Department of Mathematics, Siddaganga Institute of Technology (SIT), Tumkur-572 103, Karnataka during 09-11 June, 2016.
- 318. Delivered Inauguration and Keynote address on "Graph Theory and its Applications" in FDP on Engineering Mathematics through Applications (EMTA 2016) at Department of Mathematics, PSG College of Technology, Coimbatore on 4th July 2016.
- 319. Invited talk on "Cellular Manufacturing Systems" in Department of Applied Mathematics, PSG College of Technology, Coimbatore on 4th July 2016.
- 320. Delivered an Invited talk on "Coprime labelings of graphs" in the 9th International Workshop on Graph Labelings (IWOGL 2016) held at AGH University of Science and Technology Krakow, Poland through Skype on 7th July 2016.

- 321. Invited talk on "Co-Prime Index of a Graph" in the 29th International Conference of the Jangjeon Mathematical Society on Number Theory, Special Functions and its applications at Department of Mathematics, Pondicheery University, Pondicheery during August 8-10, 2016.
- 322. Invited talk on "Applications of Graph Theory to Social Networks and Biological Networks" in the UGC Sponsored Refresher Course in Mathematics at Department of Mathematics, Pondicheery University, Pondicheery on 7 September 2016.
- 323. Plenary talk on "Magic and Antimagic Labelings of Graphs" in the International Conference on Current Trends in Graph Theory and Computation at Department of Mathematics, South Asian University, Delhi during September 17-19, 2016.
- 324. Participated in 4th Global Conference on Business and Social Sciences held at Dubai during November 14-15, 2016.
- 325. Six Invited talks on "Domination in Graphs, Algorithms, Hanoi Graphs and Social and Biological Networks" in the two weeks workshop on Graph Theory-Algorithms & Applications held at BMS College of Engineering, Bangalore during January 3-4, 2017
- 326. Guest Lecture on "Hanoi Graphs" at Department of Mathematics, BITS-Pilani Goa Campus on 30th January 2017.
- 327. Plenary talk on "Hanoi Graphs and Distance related concepts" in the National Conference on Discrete Mathematics at Department of Mathematics, Savitribai Phule Pune University, Pune during February 20-22, 2017.
- 328. Invited talk on "Cayley Graphs and Interconnection Networks" in the Workshop on Interconnection Networks at Department of Mathematics, Amrita University, Coimbatore on 24th April 2017
- 329. Invited talk on "Mathematics in Real Life" in the Workshop on Teaching Strategies in Mathematics at at Department of Mathematics, BITS-Pilani Goa Campus during April 28-29, 2017.
- 330. Invited talk on "Graphs with Equal Domination Number and Independence Domination Number" in the 5th India-Taiwan Conference on Discrete Mathematics at Tamkung University, Taipei during July 18-21, 2017.
- 331. Guest Iscture on Hanoi Graphs at the Department of Mathematics, BITS-Pilani K.K. Birla Goa campus Goa on 19th September 2017.
- 332. Guest lecture on "Polya Theory" at the Department of Mathematics, BITS-Pilani K.K. Birla Goa campus Goa on 21st September 2017
- 333. Guest lecture on "Hanoi graphs and social networks" at the Department of Mathematics, Dr. G.S.G.W.F.G college &PG study centre, Udupi on 25th September 2017.
- 334. Invited talk on "Banach Spaces" in the one-day National workshop on Analysis and Topology, at the department mathematics at Dr. G..S.G.W.F.G College & PG Study Centre, Udupi on 27th September 2017.
- 335. Guest lecture on "Social Network Analysis" at the Department of Statistics, Manipal University on 6th October 2017

- 336. Invited talk on "Biological Networks" at Jawaharlal Nehru University, New Delhi on 11th October 2017.
- 337. Invited talk on "Computational Biology and Biological Networks" at the Department of Mathematics, IIT, New Delhi on 11th October 2017.
- 338. Invited talk on "Graph Theoretical Concepts in the Study of Biological Networks" in the International Conference on Recent Trends in Graphs and Networks (ICRTGN 2017) at Department of Mathematics, St. Xavier's College for Women, Aluva during 30th October – 1st November 2017.
- 339. Guest lecture on "Conducting and interpreting Social Network Analysis" at the Department of Statistics, Manipal University on 3rd November 2017.
- 340. Guest Lecture on "Graph theoretic models in social network analysis" at the Department of Pure Mathematics, University of Calcutta on 23rd November 2017.
- 341. Guest Lecture on "NP-Completeness" at the Department of Pure Mathematics, University of Calcutta on 23rd November 2017.
- 342. Delivered Mahadev Dutta Memorial Endowment Lecture on "Biological networks" at the Department of Pure Mathematics, University of Calcutta on 24th November 2017.
- 343. Invited talk on "Hanoi Graphs" in the One day special lecture series on Recent Developments in Mathematical Modeling and Applications at Department of Mathematics, Mangalore University, Mangalore on 5th December 2017
- 344. Invited talk on "Vector spaces associated with graphs" in the International conference on Linear Algebra and Applications at the Department of Statistics, Manipal University during December 11 15, 2017.
- 345. Two guest lectures on "Social network analysis and Vector spaces associated with graphs" at the Department of Mathematics, Ayya Nadar Janaki Ammal College, Sivakasi on 4th January 2018.
- 346. Keynote address on "Magic and Antimagic Labelings" in the UGC Sponsored International Conference on Discrete Mathematics and its Applications at Department of Mathematics, Manonmaniam Sundaranar University, Tirunelveli during January 18-20, 2018.
- 347. Six invited talks on "Spectral Graph Theory, Vector Spaces Assoicated with a Graph and Cayley Graphs" in a six days workshop on Albebraic graph theory at Department of Mathematical and Computational Sciences, NITK, Surathkal during January 25-30, 2018.
- 348. Invited talk on "Hanoi Graphs" in the National Conference on Graph Theory and Discrete Mathematics at Department of Mathematics, Mangalore University, Mangalore during February 5-6, 2018.
- 349. Guest lecture on "Algebraic Graph Theory" at the Department of Mathematics, BITS-Pilani K.K. Birla Goa campus Goa on 23rd February 2018.
- 350. Two guest lectures on Social network analysis and Vector spaces associated with graphs" at the Department of Mathematical Sciences, Kannur University, Kerala on 12th March 2018.

- 351. Two invited talks on "Applications of Graph theory to Social and Biological networks" and "Graph Labelling Problems" in the Refresher Course in Mathematical Sciences at at the Department of Mathematical Sciences, Kannur University, Kerala on 13th March 2018.
- 352. Invited talk on "Local antimagic colorings" in the International Conference on Discrete Mathematics and its Applications to Network Science at BITS-Pilani Goa campus during July 7-10, 2018
- 353. Invited talk on "Antimagic and local antimagic labelings of graph"s in the International Work shop Graph Labelings at Ball state University, USA during September 26 28, 2018
- 354. Harary Lecture on" Domination and Coloring in graphs" in MIGHTY 2018 at Purdue University USA during September 28 29. 2018
- 355. Guest lecture on "Applications of Graph Theory" at Poornapraja College, Udupi on 10th October 2018
- 356. Guest lecture on "Network Science Structure, Stability and Emergence" in the Department of Statistics, Manipal academy Higher Education, Manipal on 10th November 2018.
- 357. Invited talk on "Small World Networks" in the International Conference on Discrete Mathematics and Theoretical Computer Science at SSN College of Engineering, Chennai during December 3 6, 2018.
- 358. Invited talk on "Magic and Antimagic Labelings" in the Post -Conference workshop on Graph Labelings at National College, Trichy during December 15 -20, 2018.
- 359. Invited talk on "Labelings and Colorings in graphs" in the International Conference on Graph Theory and its Applications at Amrita Viswa Vidya Peedam, Coimbatore during January 4-6, 2019.
- 360. Invited talk on "Network science and its Applications" in the International conference on Discrete Mathematics at St. Joseph's College, Trichy during January 7-9, 2019.
- 361. Invited talk on "Social and Biological Networks" in the National Conference on Bioinspired computing at Bishop Heber College, Trichy during January 10-11, 2019.
- 362. Invited talk on "Network science and its Applications" in the National Conference on Discrete Mathematics and its Applications at Kannur University, Kerala during January 28-29, 2019.
- 363. Guest lecture on "Small World Graphs" at Ramanujan College, Delhi on 4th February 2019
- 364. Guest lecture on "1-2-3 conjecture" at the Department of Mathematics, IIT, Delhi on 5th February 2019.
- 365. Guest lecture on "Applications of graph theory" at Shivaji College, Delhi on 6th February 2019.
- 366. Guest lecture on "Magic and antimagic labelings of graphs" at St. Mary's College, Trissur, Kerala on 19th February 2019

- 367. Guest lecture on "Centrality measures" at St.Mary's College, Trissur, Kerala on 20th February 2019.
- 368. Guest lectures on "Graph theory and its applications" at G. Shankar Government PG College for women, Udupi during 25th February to 1st March 2019.
- 369. Guest lecture on "Extremal graph theory" at the Department of Mathematics, Mangalore University, Mangalore on 16th March 2019.
- 370. Invited talks on "Various aspects of domination in graphs" in the National Workshop on domination in Graphs and algorithms at NIT, Warangal during April 8-13, 2019

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).
- 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.
- 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
- 28. International Conference on Theoretical Computer Science and Discrete Mathematics (ICTCSDM 2016) at Kalasalingam University, Krishnankoil December 19-21, 2016.

LIST OF RESEARCH PUBLICATIONS

- Subbulakshmi S Rajan and S. Arumugam, On forcibly unilaterally connected acyclic digraphic sequences, *The Mahematics Student*, **52** (1984), 251-252.
- 2. Subbulakshmi S Rajan and S. Arumugam, On forcibly disconnected acyclic graphic sequences, *The Mathematics Student*, **52** (1984), 242-244.
- 3. S. Arumugam, On topological projective planes-I, *Publ. Math. Debrecen* **32** (1985), 251-253.
- 4. S. Arumugam, On topological projective planes-II, *Indian J.pure appl. Math.* **17** (11) (1986), 1314-1316.
- 5. S. Arumugam, Topological projective planes, *Kyungpook Math. J.* **26** (1986), 217-222.

- 6. S. Arumugam and P. Venuvanalingam, Calculation of MO energy levels of conjugated systems using graph theory, *Chemistry Education* **5** (1) (1988), 14-17.
- 7. C. Pakkiam and S. Arumugam, On the graphoidal covering number of a graph, *Indian J. pure appl. Math.* **20** (4) (1989), 330-333.
- 8. S. Arumugam, On topological projective planes III, *Indian J. pure appl. Math,* **20** (11) (1989), 1115-1118.
- 9. C. Pakkiam and S. Arumugam, On graphoidal graphs of a tree, *Indian J. pure appl. Math.* **21**(12) (1990), 1055-1058.
- 10. S. Arumugam, A note on topological projective planes, *Indian J. pure appl. Math,* **22** (1) (1991), 83-84.
- 11. N. Veerapandian and S. Arumugm, On Balanced graphs, *Ars Combinatoria*, **32** (1991), 221-223.
- 12. N. Veerapandian, P.N. Ramachandran and S. Arumugam, On k-balanced graphs, *J.Ramanujan Math. Soc.* **6** (1991), 1-8.
- 13. J. Paulraj Joseph and S. Arumugam On connected cutfree domination in graphs, *Indian J. pure appl. Math.* **23** (9) (1992), 643-647.
- 14. C. Pakkiam and S. Arumugam, The graphoidal covering number of unicyclic graphs, *Indian J. pure appl. Math.* **23** (2) (1992), 141-143.
- 15. J. Paulraj Joseph and S. Arumugam, Domination and connectivity in graphs, *International Journal of Management and Systems* **8** (1992), 233-236.
- 16. S. Arumugam, Topological projective planes, Symposium on *Trends in Algebra and Topology-1992* Madurai Kamaraj University technical Report, (1992), 81-86.
- 17. S. Arumugam and C. Pakkiam, Graphs with unique minimum Graphoidal cover, *Indian J. pure. Appl. Math.*, **25**(11) (1994), 1147-1153.
- 18. S. Arumugam and C. Pakkiam, The graphoidal covering number of hypergraphs, *International Journal of Management and Systems* **10** (1994), 195-200.
- 19. J. Paulraj Joseph and S.Arumugam, On the Connected domatic number of a graph. *J. Ramanujan Math Soc.* **9** (1994), 69-77.
- 20. S. Arumugam and C. Pakkiam, Graphoidal bipartite graphs, *Graphs and Combinators*. **10**(1994), 305-310.
- 21. S. Arumugam and J. Paulraj Joseph, Uniform domination in graphs, *International Journal of Management and Systems*, **11** (1995), 111-116.
- 22. S. Arumugam, Domination in graphs-recent developments and some open problems, in *Recent Trends in Mathematics*, Ed. M.L. Santiago (1995), 26-33.
- 23. S. Arumugam and C. Pakkiam, Graphoidal covering number of digraphs, *Journal of Mathematical and Physical Sciences*, **29** (1995), 33-41.
- 24. S. Arumugam and J. Paulraj Joseph, Domination in graphs, *International Journal of Management and Systems*, **11** (1995), 177-182.
- 25. J. Paulraj Joseph and S. Arumugam, On 2-edge connected domination in graphs, *International Journal of Management and Systems*, **12**(2) (1996), 131-138.
- 26. S. Arumugam and J. Paulraj Joseph, Domination in subdivision graphs, *J.Indian Math. Soc.*, **62** (1996), 274-282.

- 27. S. Arumugam and A. Thuraiswamy, Total domination in graphs, *Ars Combinatoria*, **43** (1996) 89-92.
- 28. S. Arumugam and R. Kala, Domination parameters of star graph, *Ars Combinatoria*, **44** (1996), 93-96.
- 29. S. Arumugam and K. A. Germina, Note On indexable graphs, *Discrete Mathematics*, **161** (1996), 285-289.
- S. Arumugam, Indra Rajasingh, R. Bharathi and Roushini Leely Pushpam, On graphs whose graphoidal covering number is one less than its cyclomatic number, Proceedings of the National workshop on Graph Theory and Its Applications, Manonmaniam Sundaranar University, Tirunelveli, 1996, Eds. S. Arumugam, B.D. Acharya and E.Sampathkumar, Tata McGraw Hill, New Delhi (1997), 29-34.
- 31. S. Arumugam , B.D. Acharya and E.Sampathkumar, Graphoidal covers of graph- A creative review, in *Proceedings of the National Workshop on Graph Theory and Its Applications, Manonmaniam Sundaranar University, Tirunelveli,* 1996, Eds S. Arumugam, B.D. Acharya and E.Sampahkumar, Tata McGraw Hill, New Delhi (1997), 1-28.
- 32. C. Xavier, S. Arumugam and S.P. Victor, Algorithmic aspects of symmetric dihypergraphs, *Computer Science and Informatics* **27**(2) (1997) 26-31.
- 33. S. Arumugam and R.Kala, Domination parameters of hypercubes, *J. Indian Math Soc.*, **65**(1998), 31-38.
- 34. S. Arumugam and S. Velammal, Edge domination in graphs, *Taiwanese Journal of Mathematics*, **2** (2) (1998), 173-179.
- 35. S. Arumugam and J. Suresh Suseela, Acyclic graphoidal covers and path partitions in a graph, *Discrete Mathematics*, **190** (1998), 67-77.
- 36. S. Arumugam and A. Thuraiswamy, Total domatic number of a graph I, *Indian J. pure appl. Math.*, **29** (5) (1998), 513-515.
- 37. S. Arumugam and S. Meena, Graphs that are randomly packable by some common disconnected graphs, *Indian J. pure appl. Math.*, **29** (11) (1998) 1129-1136.
- 38. R.M. Suresh and S.Arumugam, Fuzzy context-free grammar for handwritten numeral recognition, IT for the new generation, *Proceedings of XXXIII Annual Convention of the Computer Society of India*, Eds. J.R. Isaac and Harita Gupta, Tata McGraw Hill (1998), 411-419.
- 39. S. Arumugam and S.Velammal, Maximum size of a connected graph with given domination parameters, *Ars Combinatoria*, **52** (1999), 221-227.
- 40. S. Arumugam and J. Paulraj Joseph, On graphs with equal domination and connected domination numbers, *Discrete Mathematics*, **206** (1999), 45-49.
- 41. J. Paulraj Joseph and S. Arumugam, Domination and colouring in graphs, *International Journal of Management and Systems*, **15**(1) (1999), 37-44.
- 42. S. Arumugam and J. Suresh Suseela, Acyclic graphoidal covering number of digraphs, *Proceedings of the Conference on Graph Connections, Cochin University*

- of Science and Technology, Eds. A.Vijayakumar et al. Allied Publishers, (1999), 72-78.
- 43. R.M. Suresh, S.Arumugam and L.Ganesan, Fuzzy approach to recognize Handwritten Tamil Characters, International Conference on Computational Intelligence and multimedia Applications (1999), Ed. Brijesh Verma Henry Selvaraj, Andre de Carvaho and Xin Yao, IEEE Computer Society (1999), 459-463.
- 44. R.M. Suresh, S. Arumugam and L. Ganesan, Handwritten characters recognition using Finite Fuzzy Automata, Information Technology for Computer Innovation CSI 1999 Annual Convention Proceedings Ed. S.P. Mudur, Tata McGraw Hill (1999), 62-73.
- 45. S. Arumugam and R. Kala, Completeness of Domination Parameters, *Proceedings* of the conference on Graph Connections, Cochin University of Science and Technology Eds.A.Vijayakumar et al Allied Publishers (1999), 67-71.
- 46. S.Arumugam, On three domination related parameters of a graph, *Proceedings of the Conference on Graph connections*, Cochin University of Science and Technology Eds. A. Vijayakumar et al, Allied Publishers (1999), 41-43.
- 47. A.P. Santha Kumaran and S. Arumugam, The sequence Space S_p, *Bulletin of Pure and Applied Sciences*, **18** (1999), 53-58.
- 48. S. Arumugam, Difference Labelings and Common weight Decompositions of Graphs, Technical Proceedings of Group discussions on Graph Labeling problems Ed. B.D. Acharya and S.M. Hegde, (1999), 15 19.
- 49. R.S. Rajesh, S.Arumugam and S.Arumugam, Resource Deadlock Free Wormhole Multicast Routing Algorithm for Directed Networks, Proceedings of the International Conference on Advances in Mathematical Sciences 2000, Narosha Publishing House, (2000), 359-366.
- 50. S. Arumugam and J. Suresh Suseela, On Graphoidal graphs, Journal of Discrete Mathematical Sciences and Cyptography, 3 (2000) 131-137.
- S. Arumugam, Indra Rajasingh and Roushini Lily Pushpam, Note Graphs whose acyclic graphoidal covering number is one less than its maximum degree, *Discrete Math*, 240 (2001) 231-237.
- R.S. Rajesh, S. Arumugam and S. Arumugam, A dual step multicast wormhole routing algorithm for two dimensional mesh network, Proceedings of the twentyfifth National Systems Conference (NSC 2001) 328-331.
- 53. J. Suresh Kumar and S. Arumugam, On ψ chromatic number of graphs, Proceedings of the National Conference on Mathematical and Computational models, (2001) 287-292 .
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- 56. A.P. Santha Kumaran and S. Arumugam, Centrality with respect to Cliques, *International Journal of Management and Systems*, **18**(3) (2002), 275-280.
- 57. S. Arumugam, Path Decomposition in Graphs-A Survey, Proceedings of KMA National Seminar on Discrete Mathematics and Applications, (2003) 45-54.
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- S. Arumugam, Indra Rajasingh and Roushini Leely Pushpam, On Graphs Whose Acyclic Graphoidal Covering Number Is One Less than Its Cyclomatic Number, *Ars Combinatoria*, Vol 72(2004), 255-261.
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- 62. S. Arumugam and R. Kala, Connected domsaturation number of a graph *Indian. J. pure appl. Math.*, **35**(10) (2004), 1215-1221.
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- 64. K. Jacob and S. Arumugam, Domatic Number of a Digraph, *Bulletin of the Kerala Mathematical Association*, **2**(1) (2005), 93 103.
- 65. K. Muneeswaran, L. Ganesan, S. Arumugam and K. Ruba Soundar, Texture classification with combined rotation and scale invariant wavelet features, *Pattern Recognition*, **38**(2005), 1495 1506.
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 Ed. R. Arumuganathan and R. Nadarajan , (2005), 81 – 90.
- K. Muneeswaran, L. Ganesan, S. Arumugam and P. Harinarayan, A Novel Approach Combining Gabor Wavelet and Moments for Texture Segmentation, *International Journal of Wavelets, Multiresolution and Information Processing*, 3(4) (2005), 559 – 572.
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- 71. S. Arumugam and S. Meena, Difference Labellings and Common-Weight Decompositions of Graphs, *The Mathematics Student*, **74**(1-4)(2005), 217 223.
- 72. K.G Srinivasagan, L. Ganesan and S. Arumugam, Tamil Hand Written Recognition Using Crucial Combination, *Indian Journal of Information Science & Technology*, **1**(1) (2005), 1-9.
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- 75. K. Muneeswaran, L. Ganesan, Ruba Soundar and S. Arumugam, Frequency Domain Representation of Orthogonal Wavelet Packets for Face Recognition, Proceedings of International Conference on Resource Utilisation and Intelligent Systems, Kongu Engg., College, (2006), 846-849.
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- 78. S.P. Victor, C. Xavier and S. Arumugam, Parallel Algorithm to find a weighted core of a tree, *JCS*, **1**(4)(2006), 287-292.
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- 80. K. Muneeswaran, L. Ganesan, S. Arumugam and K. Ruba Soundar, Texture image segmentation using combined features from spatial and spectral distribution, *Pattern Recognition Letters*, **27**(7) (2006), 755-764.
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- 82. K.G Srinivasagan, L. Ganesan and S. Arumugam, Tamil Handwritten word Recognition using fuzzy values, 4th FAE International Symposium 2006, Europeen University of Legke, Turkey.
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- 85. S. Arumugam and I. Sahul Hamid, Simple Acyclic Graphoidal covers in a graph, *Australasian Journal of Combinatorics*, **37**(2007), 243 -255.
- 86. R.N. Ashlin Deepa , R. Subramanian, S. Arumugam, Recognition of Handwritten Characters through Multiset of Puzzle Pieces, Proceedings of the Third National Conference on Advanced Image processing and Networking, National Engineering College, Kovilpatti, 2007, 595-603.
- 87. S. Arumugam and I. Sahul Hamid, Graphs with unique minimum simple graphoidal cover, *Indian Journal of Mathematics* **49**(2)(2007), 151-163.
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- 227. J. Maria Jeyaseeli, Nazanin Movarraei and S. Arumugam, Dominator Coloring of Generalized Petersen Graphs, In ICTCSDM 2016, S. Arumugam, Jay Bagga, L.W. Beineke and B.S. Panda (Eds.), *Lecture Notes in Comput. Sci.*, **10398** (2017), 144-151.

- 228. P.Mohanakrishnan, K. Suthendran, S. Arumugam and T. Paneerselvam, Mixed Noise Elimination and Data Hiding for Secure Data Transmission, In ICTCSDM 2016, S. Arumugam, Jay Bagga, L.W. Beineke and B.S. Panda (Eds.), *Lecture Notes in Comput. Sci.*, **10398** (2017), 156-164.
- 229. A. Muthuselvi and S. Arumugam, Upper Majority Domination Number of a Graph, In ICTCSDM 2016, S. Arumugam, Jay Bagga, L.W. Beineke and B.S. Panda (Eds.), *Lecture Notes in Comput. Sci.*, **10398** (2017), 197-202.
- 230. M. Nalliah and S. Arumugam, Super (a,3)-edge antimagic total labeling for Union of two stars, In ICTCSDM 2016, S. Arumugam, Jay Bagga, L.W. Beineke and B.S. Panda (Eds.), *Lecture Notes in Comput. Sci.*, **10398** (2017), 203-211
- 231. Purnima Gupta, Rajesh Singh and S. Arumugam, Graphoidal Length and Graphoidal Covering Number of a Graph, In ICTCSDM 2016, S. Arumugam, Jay Bagga, L.W. Beineke and B.S. Panda (Eds.), *Lecture Notes in Comput. Sci.*, **10398** (2017), 305-311.
- 232. S. Rajeswari, K. Suthendran, K. Rajakumar and S. Arumugam, An overview of the MapReduce Model, In ICTCSDM 2016, S. Arumugam, Jay Bagga, L.W. Beineke and B.S. Panda (Eds.), *Lecture Notes in Comput. Sci.*, **10398** (2017), 312-317.
- 233. S. Rajeswari, M. Indhumathy, A. Somasundaram, Neeru Sood and S Arumugam, Identification of Salinity Stress Tolerant Proteins in Sorghum Bicolor Computational Approach, In ICTCSDM 2016, S. Arumugam, Jay Bagga, L.W. Beineke and B.S. Panda (Eds.), Lecture Notes in Comput. Sci., 10398 (2017), 318-325.
- 234. T. Subburaj, K. Suthendran and S.Arumugam, Statistical Approach to Trace the Source of Attack based on the Variability in Data flows, In ICTCSDM 2016, S. Arumugam, Jay Bagga, L.W. Beineke and B.S. Panda (Eds.), *Lecture Notes in Comput. Sci.*, 10398 (2017), 392-400.
- 235. B. Suganya and S. Arumugam, Independent Resolving Number of Convex Polytopes, In ICTCSDM 2016, S. Arumugam, Jay Bagga, L.W. Beineke and B.S. Panda (Eds.), *Lecture Notes in Comput. Sci.*, **10398** (2017), 401-408.
- 236. M. Sundarakannan and S. Arumugam, Signed cycle domination of weighted planar graphs, In ICTCSDM 2016, S. Arumugam, Jay Bagga, L.W. Beineke and B.S. Panda (Eds.), *Lecture Notes in Comput. Sci.*, **10398** (2017), 409-414.
- 237. L. Sivakumar, J. Balabaskaran, K. Thulasiraman, S. Arumugam, Virtual topologies for abstraction service for IP-VPNs, In the Proceedings of 17th International Telecommunications Network Strategy and Planning Symposium (Networks), 2016, IEEE Explore, (2016), 213-220.
- 238. S. Arumugam and R. Anantha Kumar, Distance Similar Sets in Graphs, Utilitas Math., **102** (2017), 265-281.
- 239. M. Ajitha and S. Arumugam, Finger Base An Algorithm to Predict the Incidence of Zinc Finger Motif From Uncharacterized Proteins, Current Bioinformatics, **12(5)** (2017), 475-478.

- 240. S.A. Katre, Laleh Yahyaei and S. Arumugam, Coprime Index of a Graph, Electronic Notes in Discrete Mathematics, **60** (2017), 77-82.
- 241. T. Panneerselvam, S. Arumugam, M. Indhumathy, Shrinivas D. Joshi and Uttam A. More, Graph Theoretical Analysis, Insilico Modeling, Design, and Synthesis of Compounds Containing Benzimidazole Skeleton as Anti-depressant Agents, Chemical Biology & Drug Design, 89(5) (2017), 714-722.
- 242. T. Panneerselvam, V. Sivakumar, S. Arumugam, K. Selvaraj, M. Indhumathy, Design, Network Analysis and *In Silico* Modeling of Biologically Significant 4-(substituted benzyl)-2-Amino-6-HydroxyPyrimidine-5-Carboxamide Nanoparticles, *Drug Research*, 67(5) (2017), 289-301.
- 243. T. Panneerselvam, S. Arumugam, M. Ashraf Ali, K. Selvaraj, M. Indhumathy, A. Sivakumar and S. D. Joshi, Design, Network Analysis, Insilico Modeling and Synthesis of Benzimidazoles Nanocomposites as Anticancer agent, Chemistry Select, **2**(7) (2017), 2341-2347.
- 244. T. Panneerselvam, S. Arumugam, K. Selvaraj, A. Sankarganesh, M. Indhumathy and A. Sivakumar, Design, Network Analysis, *Insilico* Modeling and Synthesis of Biologically Active Thiazolo Quinazoline Scaffolds as Anti-tubercular Agent, Current Chemical Biology, **11**(2) (2017), 140-149.
- 245. T. Panneerselvam, K. Selvaraj, S. Arumugam, S.D. Joshi, S. Arunachalam and M. Indhumathy, Graph Theoretical Analysis, *Insilico* modeling, Design and Microwave Assisted Synthesis of Biologically Active Pyrimidines and Quinazolines as Antimicrobial and Antitubercular Agent, Current Microwave Chemistry, **4**(3) (2017), 242-255.
- 246. Gily V. Magalona, Rolando G. Panopio and S. Arumugam, On Modular Signatures of Some Autographs, Manila Journal of Science, **10** (2017), 126-130.
- 247. A. Godinho, T. Singh and S. Arumugam, The Distance Magic Index of a Graph, Discussiones Mathematicae Graph Theory, **38** (2018), 135-142.
- 248. M. Indhumathy, Ahmed R. Nabhan and S. Arumugam, A Weighted Association Rule Mining Method for Predicting HCV-Human Protein Interactions, Current Bioinformatics, **13**(1) (2018), 73-84.
- 249. M. Ajitha, K. Sundar, S. Arul Mugilan and S. Arumugam, Development of METAL-ACTIVE SITE and ZINCCLUSTER tool to predictactive site pockets, Proteins, Structure, function, Bioinformatics, **86**(3) (2018), 322-331.
- 250. S. Arumugam and A. Muthuselvi, Majority Domination in Graphs, J. Combin. Math. Combin. Comput. **104** (2018), 111-120.
- 251. S. Arumugam, R. Anantha Kumar and S.B. Rao, Nondeficient Sets in Graphs, Utilitas Math., (Accepted)
- 252. A. Muthuselvi and S. Arumugam, On Majority Total Domination in Graphs, Utilitas Math., (Accepted)
- 253. S. Arumugam, A.P. Santhakumaran, P. Titus, P. Balakrishnan, The upper connected vertex detour monophonic number of a graph, Indian Journal of Pure and Applied Mathematics (Accepted).

- 254. Jessica Pereira, T. Singh and S. Arumugam, Edge consecutive gracefulness of a graph, Discrete Appl. Math., (2018), https://doi.org/10.1016/j.dam.2018.09.019
- 255. Manju Raju, Kiran R. Bhutani, Babak Moazzez and S. Arumugam, On F-domination in Graphs, AKCE Int. J. Graphs Combin., (2018), https://doi.org/10.1016/j.akcej.2018.07.004
- 256. B. Suganya and S. Arumugam, Independent Metric Dimension of Mobius Ladders, Proceedings of Jangjeon Mathematical Society (Accepted)
- 257. Manju Raju, Kiran R. Bhutani, Babak Moazzez and S. Arumugam, Algorithmic Aspects of F-Domination in Graphs, Utilitas Math., (Accepted)
- 258. S. Rajeswari, A. Somasundaram, Nishrin Abdul Gafoor, Trupti GokheleSwarup, Neeru Sood and S. Arumugam, A computational approach to identify the role ofpotassium transporter in barley, AKCE Int. J. Graphs Combin., (Accepted)
- 259. N Kamatchi, K. Paramasivam, A.V. Prajeesh, K. Muhammed Sabeel and S. Arumugam, On Group Vertex Magic Graphs, AKCE Int. J. Graphs Combin., (Accepted)
- 260. J.Deepalakshmi, G. Marimuthu, A. Somasundaram and S.Arumugam, On the 2-token graph of a graph, AKCE Int. J. Graphs Combin., (Accepted)
- 261. S.V. Divya Rashmi, A. Somasundaram and S. Arumugam, Domination Subdivision Number of a Graph, Discrete Mathematics, Algorithms and Applications (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

- Graph Theory and its Applications (Edited Proceedings of National Workshop) Tata McGraw Hill (1997).
- Graphs, Combinatorics, Algorithms and Applications (Edited Proceeding of National Conference held at Arulmigu Kalasalingam College of Engineering, Krishnankoil) Narosa Publishing House (2004).
- 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).
- 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).
- 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).
- Graph Labelings (Edited Proceedings of the Seventh International Workshop on Graph Labelings held at Natural Sciences University, Indonesia) Special Issue of AKCE International Journal of Graphs and Combinatorics Volume 10 No. 2(2013).
- 10. Optimal Network Topologies (Edited Proceedings of the Fifth International Workshop on Optimal Network Topologies held at Natural Sciences University, Indonesia) Special Issue of AKCE International Journal of Graphs and Combinatorics Volume 10 No.3(2013).
- 11. Edited Proceedings of the Eighth International Workshop on Graph Labelings held at Kalasalingam University, Krishnankoil Special Issue of Electronic Notes in Discrete Mathematics Volume 48 (2015).
- 12. Edited Proceedings of the International Conference on Graph Theory and its Applications (ICGTA-15) held at Amrita Vishwa Vidyapeetham (University), Coimbatore, Special Issue of Electronic Notes in Discrete Mathematics Volume 53 (2016).
- 13. Edited Proceedings of the Ninth International Workshop on Graph Labelings held at AGH University of Science and Technology in Cracow, Poland Special Issue of Electronic Notes in Discrete Mathematics Volume 60 (2017).

14. Edited the Proceedings of the International Conference on Theoretical Computer Science and Discrete Mathematics (ICTCSDM 2016) held at Kalasalingam University, Krishnankoil which has been published as Springer Verlag Lecture Notes in Computer Science, Volume No. 10398 (2017).

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 Sithara Jerry	Studies in Graph Theory Degree Equitable Coloring and Equitable Domination in graphs Domination Related Functions in Graphs	Anna University 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

39	B. Jayaram	Dominator Sequences for Survivable Topology Routing and Virtual Topology Construction for VPN Abstraction Service in Communication Networks	Kalasalingam University	2016
40	M. Indhumathy	Computational Analysis Of Biological Networks Using Centrality Measures And Data Mining Techniques For Identification Of Drug Targets	Kalasalingam University	2017
41	M. Ajitha	Novel Algorithms To Predict The Structure and Functions of Uncharacterized Proteins	Kalasalingam University	2017
42	S.V. Divya Rashmi	Secure Domination in Graphs	Kalasalingam University	2017
43	A. Muthuselvi	Majority Domination in Graphs	Kalasalingam University	2018
44	Manju Raju	Domination in Graphs-Theory and Applications	Mahatma Gandhi University	2019

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	Manonmaniam	2006
		Oceanographic Images	Sundaranar University	
10.	S. Monikandan	Graph Theory Problems Related to	Manonmaniam	2006
		ULAM's Conjecture	Sundaranar University	

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

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

- 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 Milwakee, USA and had interaction with Rev. Fr. Albert William during June 11-12, 2000.
- 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.
- 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".

- 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 Kratochril 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 (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.
- 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 lecturers during this period.
- 29. Visited Indiana University- Purdue University Fort Wayne (IPFW), USA on September 24, 2010, interacted with Prof. Lowel 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. Natheniel 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 Minnesotta, 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 (IWOGL2010).

- 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 3^{rd} 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.
- 60. Visited Universiti Sains Malaysia, Penang during May 10-12, 2016 and delivered ten Invited talks "Biological Networks and Graph Algorithms in the workshop on Introduction to Bioinformatics and Computational Biology via Graph Algorithms.
- 61. Delivered keynote address on "Applications of graph theory to social and biological networks" in the Global Conference on Engineering and Technology (GCOET) at KuaLa Lumpur during June 1-2, 2016.

- 62. Visited Tunghai University, Taichung Taiwan during July 9-17,2017 and delivered five lectures in the Department of Computer Science and Department of Applied Mathematics. Interacted with Dr. Tao-Ming Wang for research collaboration.
- 63. Participated in the 5th India-Taiwan Conference on Discrete Mathematics during July 18-21, 2017 at Tamkung University, Taipei, delivered an invited talk on "Graphs with Equal Domination Number and Independence Domination Number" and chaired a session.
- 64. Delivered Invited talk on Antimagic and local antimagic labelings of graphs in the International Work shop Graph Labelings at Ball state University, USA during September 26 28, 2018
- 65. Delivered Harary Lecture on Domination and Coloring in graphs in MIGHTY 2018 at Purdue University USA during September 28 29. 2018

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
- 7. Dean(R&D) at Kalasalingam University from August 2014 to June 2017

AWARDS/HONORS RECEIVED

- 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.
- 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.
- 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.
- 15. Prof. S. Arumugam has been conferred Life Time Achievement Award by GATR, Malaysia during the closing ceremony of 4th Global Conference on Business and Social Sciences held at Dubai during November 14-15, 2016
- 16. Most outstanding researcher of India Awards in Mathematics for the year 2017 by Careers 360 on 20th March 2018.

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)
- 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 seven years for CGRF is Rs. 2.11 Crores. In addition the grant received for the 10 subprojects is Rs. 1.11 Crores.

These subprojects under n-CARDMATH have been 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 05^{th} 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 ambitions 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 indexed in SCOPUS from 2011 onwards. Also journal is indexed in Thomsen Reuters Emerging Source Citation Index from 2016 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 49 years as Head of the Department of Mathematics at St. John's College, Manonmaniam Sundaranar University and Kalasalingam 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 SUMMARY OF CITATIONS:

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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.