




SRM Valliammai Engineering College

SRM Nagar, Kattankulathur-603203, Kancheepuram District, Tamil Nadu

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Department of Mathematics

Personal Details

Name :	Dr. S. CHITRA		
Designation :	Assistant Professor-Selection Grade / HOD		
Educational Qualification :	M.SC., M.PHIL., B.Ed., Ph.D.		
Experience:	24 Years 6 Months		
Area of Specialization :	GRAPH THEORY, DOMINATION SETS IN GRAPHS		
Date of Joining :	18.10.2006		
Email ID :	chitrapremkumar@yahoo.co.in chitras.maths@valliammai.co.in		
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Educational Details

S.No	Degree	Branch/Specialization	Institution / University	Year
1	B.Sc	Mathematics	Govt. Arts College, Tiruvannamalai, University Of Madras	1992
2	M.Sc.	Mathematics	Seethalakshmi Ramasamy College, Trichy, Bharathidasan University	1994
3	B.Ed	Mathematics	Lady Willington College, Chennai University of Madras	1995
4	M.Phil.	Mathematics	Madurai Kamaraj University	2001
5	Ph.D	Mathematics	Manonmaniam Sundaranar University, Tirunelveli	2016

Professional Society Memberships

1. Indian Society of Technical Education
2. Indian Science Congress Association
3. Life Member of ADMA

Publication Details

Journal Publications:

1. S. Chitra, Dr.R.Sattanathan, “ Global Perfect Domination sets in Graph” in International Journal of Computational Intelligence Research and Applications, P.125 - 128 July 2010.
2. S. Chitra, Dr.R.Sattanathan, “Global Vertex Edge Domination sets in Graph” in International Mathematical Forum, Hikari Ltd, Vol 7, No: 5, P. 233 – 240, Feb 2012. (ISSN 1312-7594)
3. S. Chitra, Dr.R.Sattanathan, “Global Vertex Edge Domination chain and its characterization” in National Journal of Discrete Mathematics and Cryptography”, Vol 15, No: 4 & 5, P.259 – 268 Aug 2012.

4. S. Chitra, Dr.R.Sattanathan, "A Mathematical Model for the Fusion of Graph Theory and Web Service Composition" in "International Journal of Computer Application", Vol 4, No:2 P.182-187 , Oct2012. (ISSN 2250-1797)
5. S. Chitra, Dr.A.Subramanian, "Maximal Vertex Edge Domination sets in Graph" has been Published in European Journal of Scientific Research", Annexure –II Vol 83, No:1 , P. 91 – 94 Dec 2012. (ISSN 1450 -216X)
6. Dr. S.Chitra, Dr. A. Bhuvaneshwari "Application of Perfect Domination In Logistics Services Using Web Service Composition" published in International journal of Computer and Mathematical Sciences, UGC approved impact factor = 4.655, Vol. 10, No2,P. 207-214 Feb 2019. (ISSN 0976 – 5727)
7. Dr. S.Chitra, N. Prabhavathy "Minimum Dominating Eccentricity energy of a Graph" published in American International Journal of Research in Science, Technology, Engineering and Mathematics, p. 57-63 in Feb 2019. (ISSN 2328 – 3491)
8. Dr. S.Chitra, Mrs. N. Prabhavathy, 'Vertex Edge and Equitable Vertex Edge Domination of Topologically Indexable Graphs', Published in the International Journal of Scientific Research & Engineering Trends, Vol. 6, No1, Jan-Feb 2020.
9. Dr. S.Chitra, Ms. N. Prabhavathy, 'A Study of Perfect Edge, Perfect Edge Covering and Perfect Edge Vertex Domination Sets in Graphs', published in the International Journal of Research and Analytical Reviews, Vol. 7, No 1, Feb 2020.
10. Dr. S. Chitra, Dr. R. Umamaheswari, Dr. D. Kavitha published "Reliability analysis and dynamic maintenance model based on fuzzy degradation approach" in "Soft Computing- Springer" <https://doi.org/10.1007/s00500-020-05388-4> Oct -2020.
11. Dr. S. Chitra ,Dr. L. Karthikeyan , Dr. C. Vijayakumaran, Samydurai Arumugam Published a Research paper "SALDEFT: Self-Adaptive Learning differential evolution based Optimal Physical machine selection for fault tolerance problem in Cloud" in Wireless Personal Communications in Jan 2021 <https://doi.org/10.1007/s11277-021-08089-9> Article No : 8089 Pages : 27
12. Dr. S. Chitra, Dr. T. Isaiyarasi Published "Authenticated Key Agreement Protocol for HWSN network" in Journal of Composition Theory in Feb 2021.
13. Dr. S. Chitra, Dr. T. Isaiyarasi Published "The study of Energy Graphs with given super domination number" in Journal of Composition Theory in Feb 2021.

Papers Presented in the Conferences and Participated:

1. S. Chitra, Dr. Sattanathan, " Global & Universal Irredundant sets in graphs" in "TANSCHÉ" Sponsored National Seminar on " Recent Advancements in Mathematics" RAM 2009 – Government Arts College, Kumbakonam, 21.12.2009- 22.12.2009.

2. S.Chitra, Dr.R.Sattanathan, “Global Edge Irredundant Set& Edge Irredundant Critical Graphs”in Sixth “Annual Instructional Conference of ADMA & Graph Theory Day” – College of Engineering, Pune, 08.06.2010 – 10.06.2010.
3. S.Chitra, Dr.R.Sattanathan“ Edge Irredundant sets and Edge Irredundant Critical Graphs” in“National Meet of Research Scholars in Mathematical Sciences NMRSMS-2010” Indian Institute of Technology, Madras, 11.10.2010 – 15.10.2010.
4. S.Chitra, Dr.R.Sattanathan, “ Global Perfect Domination of Graphs & Union of Graphs” in “ International Conference on Mathematics and Computer Science ICMCS 2011- Loyola College, Chennai, 07.01.2011 – 08.01.2011.
5. S.Chitra, Dr.R.Sattanathan, “ Perfect Edge Domination Sets in Graphs” in National Conference on “ Recent Developments in Mathematics and its Applications NCRDMA -2011, SRM university, Chennai, 31.01.2011 – 01.02.2011
6. S.Chitra, Dr.R.Sattanathan“ Global Vertex Edge Domination sets in Graphs and Product graphs” in International Conference on Mathematical and Computational Models ICMCM 2011, PSG College of Technology, Coimbatore, 19.12.2011 – 21.12.2011.
7. S.Chitra, Dr.R.Sattanathan“ Global Vertex Edge Domination sets in Total graph of path P_n Cycle C_n and Product graph of path P_n Cycle C_n , in International Conference on Mathematical Modelling& Scientific Composition, Gandhi gram Rural Institute – Deemed University, 16.03.2012 – 18.03.2012.
8. S.Chitra, Dr.A.Subramanian, “ Perfect Edge Covering and Perfect Edge vertex Domination sets in Graphs”, in UGC Sponsored National Seminar on “ Resent Developments in Functional Analysis Topology and Graph Theory – The M.D.T Hindu College Tirunelveli 26.03.15 – 27.03.15.
9. S.Chitra, Dr.A.Subramanian, “ Perfect Edge Domination and Perfect Edge Covering Domination sets in Graphs”in UGC Sponsored National Seminar on“ Resent Developments in Functional Analysis Topology and Graph Theory – The M.D.T Hindu College 26.03.15 – 27.03.15.
10. S.Chitra, Dr.A.Subramanian, “Adventures of Modern Teaching”in“National conference on modern perspectives and strategies in teaching learning and education” organized by IQAC – The M.D.T Hindu College Tirunelveli 30.10.16 - 01.11.16
11. Dr. S. Chitra Presented a paper Titled “The Study of Energy graphs with the given super strong domination number” in The International Conference “Recent Trends and Technology of Mathematics and Science” QIVCRTTMS 2020.
12. Participated in the International Virtual Conference on “Bridging Innovative Trends in Mathematics, Engineering & Technology” BITMET’20 Organized by Department of Mathematics, Bannari Amman Institute of Technology, Sathyamangalam.
13. Participated in in the International Webinar on “Bridging Mathematics Concepts to industrial Problems “organized by SMK Fomra Institute of Technology, Chennai., on 28.11.2020
14. Participated in Five days International Faculty Development Program in “Applications and Techniques in Mathematics” Organized by Department of Mathematics Sairam Institute of Technology, Chennai,

20.07.2020 to 24.07.2020

15. Participated in the Three days International Webinar “Emerging Trends in Graph Theory” Organized by PG& Research Department, Sacred Heart Arts College, Tirupattur from 14.06.2020 to 16.06.2020
16. Participated in the Three days FDP on “Aptitude for CSIR and NET” Conducted by Sathyabama Deemed University From 11.06.2020 to 13.06.2020.

Resource Person :

1. Acted as a **Resource Person** and delivered a lecture on “Introduction to Graph Theory” in the department of Computer Science, Valliammai Engineering College in June 2016
2. Acted as a **Resource Person** in National level FDP and delivered “Graph Theory and its Applications” in the department of Computer Science, Adhiparasakthi Engineering College in July 2016
3. Acted as a **Resource Person** and delivered a lecture on “Transforms and Partial differential equations ” in the department of Information Technology workshop, organized by Jerusalem College of Engineering and Technology in May 2017.
4. Acted as a **Resource Person for AICTE Sponsored six days Short Term Training Programme** in the Topic “Conventional Optimization Technique” on 19th October 2020 at SRM Valliammai Engineering College.

Webinars Faculty development Programme:

1. Dr. S. Chitra attended Online Workshop on “Intellectual Property Rights” Conducted at Pandit Deenadayal Petroleum University in association with IPPO, on 10th and 11th April 2020.
2. Dr. S. Chitra attended online webinar on “ Awareness about of Patent Filing” hosted by Patrician College of Arts and Science, Chennai on 15.05.2020
3. Dr. S. Chitra attended online webinar on “Leadership at the time of COVID crisis” Conducted by SRM University, Delhi - NCR, Ponapat on 18.05.2020.
4. Dr. S. Chitra attended online webinar on “Recent Research directions in Distance in Graph” conducted by Ayya Nadar Janaki Ammal College, Sivagasi on 28.05.2020
5. Dr. S. Chitra attended online webinar on “ Graphs from Commutative Rings” Conducted by Presidency College on 10.06.2020.
6. Dr. S. Chitra attended online International webinar on “The science of Yoga towards Health” organized by Department of Mathematics, Sathyabama University, Chennai held on 10.06.2020.
7. Dr. S. Chitra attended online webinar on “Teaching Aptitude for Graduates” organized by Department of Mathematics, Sathyabama University, Chennai held on 11.06.2020.
8. Dr. S. Chitra attended online webinar on “Soft Skills needed to face the after Pandemic Scenario” conducted by TJS Engineering College on 12.06.2020.
9. Dr. S. Chitra attended online webinar on “Narrowing the Bridge between a fresher Graduate and the Industry conducted by SAS school of Arts and Science, Chennai on 19.06.2020.
10. Dr. S. Chitra attended online webinar on “Overcoming Stress Through Personality Development” Conducted by Annai Vellankanni's College for Women, Chennai on 19.06.2020.
11. Dr. S. Chitra attended online webinar on “Stability and Stabilizability of Dynamical System” conducted by KPR Institute of Engineering & Technology, Coimbatore 24.06.2020.
12. Dr. S. Chitra attended online National webinar on “Emerging Trends in online Education- post covid 19, organized by Computer Society of India (CSI), Kancheepuram chapter held on 24.06.2020.
13. Dr. S. Chitra attended online webinar on “ Introduction to MATLAB” Conducted by PG& Research Department, GOBI Arts & Science College, Gopichettipalayam 26.06.2020
14. Dr. S. Chitra attended online webinar on “Problem solving in Graph Theory using basic concepts” conducted by Guru Nanak College Chennai on 26.06.2020.

15. Dr. S. Chitra attended online webinar on “Laplace Transformation and their Application” conducted by King’s Engineering College, Chennai on 27.06.2020.
16. Dr. S. Chitra Attended National Webinar on “Developing 21st century skills using Technology” conducted by Sri S. Ramasamy Naidu memorial College, Sattur on 01.07.2020.
17. Dr. S. Chitra Attended 5 days of International Faculty Development Programme on “Applications and Techniques in Mathematics” conducted by Sri Sai Ram Institute of Technology, Chennai From 20.07.2020 to 24.07.2020.
18. Dr. S. Chitra Attended National Webinar on "Teaching and Learning College Level Mathematics with ICT Tools" conducted by Sri Malolan College of Arts and Science, Madurantakam, Chengalpattu District, on 28.07.2020.
19. Dr. S. Chitra Attended National Webinar on “Understanding Graph theory concept with GRIN Conducted by SNS college of Technology, Coimbatore on 29.07.2020.
20. Dr. S. Chitra Attended National Webinar “Everyone can do quality Research - Talk 07” Conducted by Knowledge Institute of Technology, Salem on 06.08.2020.
21. Dr. S. Chitra Attended National Webinar on “Sage for Mathematics and Engineering” Conducted by Bannari Amman Institute of Technology, Sathyamangalam on 07.08.2020.
22. Dr. S. Chitra Attended National Webinar on “Corona - Information” Conducted by SRM Valliammai Engineering College, Chennai on 07.08.2020.
23. Dr. S. Chitra Attended National Webinar on “Modelling the spread of Covid -19” Conducted by St. Joseph's College of Engineering, Chennai on 12.08.2020.
24. Dr. S. Chitra Attended National Webinar on “An Overview of Cryptography Conducted by D.G Vaishnav College, Chennai on 20.09.2020.
25. Dr. S. Chitra Attended National Webinar on “Digital Marketing” Conducted by SRM Valliammai Engineering College, Chennai on 14.10.2020.
26. Dr. S. Chitra Attended National Webinar on “ Introduction to Operation Research in Engineering” Conducted by Ramco Institute of Technology on 22.11.2020.
27. Dr. S. Chitra Attended National Webinar on “Opportunities in Electrical Industry Conducted by FICCI SRM University on 27.11.2020.
28. Dr. S. Chitra Attended National Webinar on “Surface Chemistry” Conducted by SRM Valliammai Engineering College, Chennai on 27.11.2020.
29. Dr. S. Chitra Attended National Webinar on “Bridging Mathematics Concepts in Industrial Problems” Conducted by SMK Fomra Institute of Technology, Chennai on 28.11.2020.
30. Dr. S. Chitra Attended National Webinar on “Renewable Energy Sources Conducted by SRM Valliammai Engineering College, Chennai on 18.12.2020.
31. Dr. S. Chitra Attended National Webinar on “Innovative Research Ecosystem and Publishing Papers in High Impact Journals” organized by Research and Innovation Centre and Raja Rajeswari Institution Innovation Council (RRIIC) of Raja Rajeswari College of Engineering, on 26.03.2021
32. Dr. S. Chitra attended National webinar conducted by FICCI, SRM Valliammai Engineering College on “You are the pillar of India’s Growth” on 29.03.2021

Other Particulars

Courses Completed:

1. Completed NPTEL online course Introduction to Probability and Statistics in the year 2018.
2. Completed NPTEL online course Introduction to Psychology in the year 2017.
3. Completed NPTEL online course Introduction to Research in the year 2016 with Elite.

List of Books Authored:

1. MA8151 – Engineering Mathematics –I , Authored as per Anna University syllabus 2017 regulation with ISBN : 978- 93- 86598- 40- 4
2. MA8251 – Engineering Mathematics –II , Authored as per Anna University syllabus 2017 regulation with ISBN : 978- 93- 86598- 40- 4
3. MA8353 – Transforms and Partial Differential Equations , Authored as per Anna University syllabus 2017 regulation with ISBN : 978- 93- 86590- 59- 6
4. MA8352 – Linear Algebra and Partial Differential Equations, Authored as per Anna University syllabus 2017 regulation.

Seminar/Conference Organized:

1. Organized one day workshop on “Recent Trends in Mathematics with Computer applications” RTMCA -2K14 20th December 2014.
2. Organized “National Seminar on Advances in Mathematical Sciences and Applications in Engineering and Technology” on December 2017.
3. Organized “National seminar on “Recent trends in Mathematical Sciences and Applications” on December 2018.
4. Organized “ National Seminar on Mathematical Techniques and their Applications” on December 2019.
5. Organized One week Faculty Development program for our Department staff in Engineering Mathematics and its Applications.
6. Organizes National Webinar “Application of Monotonic Functions in Modelling Life time data” on 20.09.2020