



DEPARTMENT OF MATHEMATICS

SRI CHANDRASEKHARENDRASARASWATHI VISWA MAHAVIDYALAYA (SCSVMV)

(Deemed to be University u/s 3 of UGC Act 1956) (Accredited with "A" Grade by NAAC)
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GANITH VAARTHA

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ABOUT THE DEPARTMENT

The Department of Mathematics, established in 1994, aims to impart state of the art knowledge, practical skills in the latest advancements in the respective domain to achieve excellence in both academic and research perspectives. The department fosters excellence in B.Sc., M.Sc., and Research programs (Regular and part time) and acts as a supporting department to all Engineering courses, B.Sc.(CS), B.C.A, M.C.A and M.B.A. The department has qualified and goal-oriented 22 faculty members who are actively involved in research in diverse areas such as Algebra, Graph Theory, Queuing Theory and Operations Research. Interdisciplinary research is also encouraged. The department is strengthened by a faculty team of 22 members among which 16 are doctorates. So far 34 Ph.D degrees have been awarded and five scholars are pursuing research under the department. The focus on research promotes the publications and 296 research papers were published in the last five years.

GREETINGS FROM DEPARTMENT CHAIR

It is a great pleasure to extend my heart felt greetings to the readers of the ninth edition of Ganithavaartha, department newsletter. I sincerely hope that you will enjoy reading about the accomplishments of our faculty. The Newsletter is published twice in a year. This issue contains the activities about our department from January to June, 2021. The department is regularly organizing workshops, seminars, quality enrichment programs, research colloquiums etc., to be familiar in the latest trends in mathematics and career guidance programs and skill development courses are introduced for our students to face the competitive world. Also, our students are encouraged to actively participate in various competitions organized by other departments and to present papers in conferences and seminars.



Dr. K. Srinivasa Rao

FACULTY TEAM

S.No.	Name	Designation	Area of Specialization
1.	Prof.Dr.K.SrinivasaRao	Professor & Head	Algebra
2.	Dr.N.Saradha	Assistant Professor	Graph Theory
3.	Dr. R.Malathi	Assistant Professor	Multi Valued Logic
4.	Dr. D.Vijayalakshmi	Assistant Professor	Graph Theory
5.	Dr. E.Geetha	Assistant Professor	Fluid Dynamics
6.	Dr. R.Mageswari	Assistant Professor	Graph Theory
7.	Dr. P.Nagarajan	Assistant Professor	Queuing Theory
8.	Dr. P.Balaji	Assistant Professor	Petri Nets
9.	Dr. S.Vijayarathi	Assistant Professor	Algebra
10.	Dr.K.Pramila	Assistant Professor	Fuzzy Set Theory
11.	Dr.J.SengamalaSelvi	Assistant Professor	Applied Mathematics using ICT
12.	Dr.V.K.Radhakrishnan	Assistant Professor	Operations Research
13.	Dr. A.Dhanalakshmi	Assistant Professor	Graph Theory
14.	Dr.K.Bharathi	Assistant Professor	Operations Research
15.	Dr.T.N.Kavitha	Assistant Professor	Algebra
16.	Dr. A.Gayathri	Assistant Professor	Mathematical Physics
17.	Mrs.B. Amudha	Teaching Assistant	Real Analysis
18.	Mr. K.Saravanan	Teaching Assistant	Graph Theory
19.	Mrs .A. Shakila	Teaching Assistant	Graph Theory
20.	Mrs.P.Revathy	Teaching Assistant	Topology
21.	Mrs. G.Subasri	Teaching Assistant	Graph Theory
22.	Mrs. N.Meenakshi	Teaching Assistant	Graph Theory

OUTREACH PROGRAMMES

1. **Dr.K.Srinivasa Rao**, Professor of Mathematics delivered a talk on **Getting Started With MATLAB** on 11-04-2021, organized by Mathematics and Abstractions, Pakistan.
2. **Dr.K.Srinivasa Rao**, Professor of Mathematics acted as a resource person on 14-06-2021 to deliver two expert lectures in the Two Days National Level Workshop on **EDA Simulation Tools and Its Applications in Engineering** held from 14-06-2021 to 15-06-2021 organized by the Department of Electronics and Communication Engineering, B.P.S. Women University, Khanpur Kalan (Sonepet), Haryana
3. **Dr. J.Sengamalaselvi**, Asst. Professor of Mathematics has given the invited talk in the **Virtual women's day celebration**, Organized by the department of Computer Science Engineering, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram on 08.03.2021.
4. **Dr. J.Sengamalaselvi**, Asst. Professor of Mathematics acted as a Resource person in the **valedictory function of Mathematics Association** organized by the Department of Mathematics, Ayyanadar Janaki Ammal college, Sivakasi, Tamilnadu on 03.05.2021
5. **Dr.A.Gayathri** Asst. Professor of Mathematics acted as Chief guest and mentor for the three days collaborative peer group training programme on **problem solving of Statistics with R-Programming and Operations Research with Excel solver** jointly organized by the Department of Mathematics Ayya Nadar Janaki Ammal College (Autonomous), Sivakasi and V.V.Vanniaperumal College for women(Autonomous), Virudhunagar from 1st June to 3rd June, 2021.
6. **Dr. P.Balaji**, Asst. Professor of Mathematics attended BOS Meeting at Sri Manakula Vinayaga Engg College, Pudhucherry on 31.3.20121.

GANITHA UPASTHITI PRABANDAN

Dr. V K Radhakrishnan, Assistant Professor of Mathematics, designed/developed an attendance management system, "**Ganitha Upasthiti Prabandan**", using Google Forms to maintain the attendance record of Mathematics Department course during this lockdown/online classes period which also calculates the attendance percentage of all the students.

JOURNAL PUBLICATIONS

1. **K.Srinivasa Rao**, K.N.Prakasha, **K.Saravanan**, Ismail Naci Cangul, Maximum Degree Energy, Advanced Studies in Contemporary Mathematics, 31(2021), No.1, pp.49-66.
2. **K.Srinivasa Rao**, **B.Amudha**, symmetric division Deg index, SDD and Randic Metrices, Proc. Jangjeon Math. Soc. Vol. 24 (2021), No. 3, 389-402.
3. **N.Saradha**, Secure Triple connected two domination of a graph, GIS Science Journal, Volume 8 (6), June 2021, 1858-1869.
4. **N.Saradha**, Equivalence (1,2) domination of a graph, GIS Science Journal, Volume 8 (6), June 2021, 2209-2217.
5. **Vijayalakshmi. D**, Directed graph with DA Matrix in Similarity and Dissimilarity Study of Protein, Physics& Statistics , ESN Publications, India 2021, 124-138.
6. **P.Balaji**, Converting Four Work Station Automated Manufacturing system's Marked graph into Digraphs and their Analysis, Mukta Shabd Journal , Volume X, issue V, May 2021.211-217.
7. **Dhanalakshmi.A**, "Weighted Vertex PI Index of Crown and Fan Graph", International Journal of Research Publication and Reviews(IJRPR), Volume 2, Issue 4,2021, pp 143-146 , April 2021.
8. **K.Bharathi**, "Design of Project Networks and Solving by Critical Path Analyzes". International Journal of Research Publication and Reviews, ISSN: 2582-7421, Vol (2) Issue (4) (April - 2021) Page 182-185.
9. **T N Kavitha**, "A New Identity From Near Idempotent", Proceedings of International Conference on "Computational Mathematics" (ICCM 2021) 11th January 2021, Organized by Department Of Mathematics, Rathinam College Of Arts And Science,(Autonomous), Eachanari, Coimbatore, ISBN 978-93-89105-57-5.

PAPER PRESENTATIONS

1. **Dr. K. Srinivasa Rao** presented a paper titled “Calculation of Maximum Degree Energy Using Integrals “ in the National E-Conference on Recent Trends in Mathematics-2021, Organised by the department of Mathematics, BIST, BIHER, Thiruvanchery, Chennai, on 22nd January 2021.
2. **Dr. K.Srinivasa Rao** presented a paper on the topic ”The sub-near-rings of a Homomorphic Group Semi Turing Machine form a Near Ring Structure”, at International Conference on Advances in Mathematics and Computer Science2021, organized by IMRF Institute of Higher Education and Research, Vijayawada, A.P, during 16-17 April,2021.
3. **Dr. Vijayalakshmi.D**, presented a paper on the topic “ Laplacian Matrix of stable Protein Graph and Protein Study” in National e-Conference on Recent Advances in Applied Statistics organised by Department of Statistics, School of computational Sciences ,Punyashlok Ahilyadevi holkar Solapur University, Solapur held on 24.04.21.
4. **Dr.Vijayalakshmi.D**, presented a paper titled “A Graph theoretical Approach in Similarity/Dissimilarity Study of Proteins”in “International Virtual Conference on Computational Mathematics-2K21”, organized byDepartment of Mathematics, PPG College of Arts and Science, Coimbatore, India held on 24.06.21-25.06.21.
5. **Dr.. Mageswari.R** , presented a paper titled “Finding Hydrophobic Core of a Protein through Augmented Zagreb Index” in the national conference on Recent Frontiers in Fractional Calculus theory and its Applications (NCFCTA 2021), 7-8th March 2021, organized by Department of Mathematics, Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering College, Chennai.
6. **Dr. Mageswari.R** , presented a paper titled “Protein Core Identification Through Perfect Domination” presented in the national conference on Recent Frontiers in Fractional Calculus Theory and its Applications (NCFCTA 2021), 7-8th March 2021, organized by Department of Mathematics, Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering College, Chennai.
7. **Dr. K.Pramila** presented a paper entitled , “ Study on Domination Number and Bondage Number of Stacked Prism Graphs” presented in the National Conference on Recent Frontiers in Fractional Calculus Theory and its Applications (NCFCTA 2021), 7-8th March 2021, organized by Department of Mathematics, Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering College, Chennai, in virtual mode.

8. **Dr. P.Balaji** presented a paper titled, Analysis of Marked Graphs of an Automated Manufacturing Cell with Three Machines and Three Robots Using Sign Incidence Matrix in the "National E-Conference on Recent Trends in Mathematics-2021 (NECRTM-2021)" Organized by the Department of Mathematics, Faculty of Arts & Science, BIST, BIHER, Thiruvanchery, Chennai, Tamil Nadu, India on 22nd January 2021.
9. **Dr. V.K. Radha Krishnan** presented a paper titled, "Monte-Carlo Simulation Study on the Queueing Model of Kanchi Kamakshi Amman Temple", in the National Conference on Future Perspective for Basic Science organised by Dept. of Mathematics, AVIT Chennai, during April 8 and 9, 2021.
10. **Dr.T.N. Kavitha** presented a paper titled "A new identity from near idempotent" in international virtual conference on Recent Development in computational Mathematics (ICCM-21) on January 11, 2021 organised by Department of Mathematics, Rathinam college of arts and science, Coimbatore-21.
11. **Dr.T N. Kavitha** presented a paper titled 'A New Signifier Of Near Idempotent Semigroup' In The 'National e-Conference On Recent Trends In Mathematics-2021 (NECRTM-2021)" Organized By The Department Of Mathematics, Faculty Of Arts & Science, BIST, Biher, Thiruvanchery, Chennai, Tamil Nadu, India On 22nd January 2021.
12. **Mr. K.Saravanan** presented a paper titled "Maximum degree energy using integrals" in the National E-Conference on Recent Trends in Mathematics-2021 at Bharath Institute of Higher Education and Research on 22/01/2021.

AWARDS RECEIVED

Dr. K. Bharathi, Asst. Professor of Mathematics has received the "Honour & Recognition on constant support and outstanding performance in record event Award", Maximum Authors Contributing for Book on Covid 19 and its Impact , ESN Publications.

BOOK PUBLICATIONS

1. **Dr.J.Sengamalaselvi** has a contribution of Book chapter in “ Application of Fuzzy Soft Matrix” for the Book of Physics and Statics with ISBN NO:978-81-950305-3-8 in the Record Event (Maximum Authors Contributing For a Book On Covid 19 And Its Impact) held in January 2021 at Chennai, India Organized by ESN Publications, Chennai.
2. **Dr.V.K.Radhakrishnan** has a contribution of Book chapter in Physics & Statistics – Mathematical Analysis on the Queueing Model of Temples – A Case Study – ISBN: 978-81-950305-3-8, Jan 2021.
3. **Dr.A.Dhanalakshmi** has a contribution of Book chapter in “Weiner Index of Hexagonal Chain by Cut Method” for the Book of Physics and Statics with ISBN NO:978-81-950305-3-8 in the Record Event (Maximum Authors Contributing for a Book On Covid 19 And Its Impact) held in January 2021 at Chennai, India Organized by ESN Publications, Chennai.
4. **Dr.K.Bharathi** has a contribution of Book chapter in “ Model of Project Networks and Critical Path Analyses” for the Book Physics and Statistics, Maximum Authors Contributing for Book on Covid 19 and its Impact , ESN Publications , ISBN : 78 – 81 – 950305 – 3 – 8, Jan 2021.
5. **Dr.T.N. Kavitha** has a contribution of Book chapter in ‘Physics and statistics’ with the topic of “My experience in COVID-19- PANDEMIC with Kanitham Vasappadam”, in the record event (Maximum authors contributing for a book on covid- 19 and its impact) held in January 2021 at Chennai, organised by ESN Publication. ISBN: 978-81-947019-4-1.
6. **Dr.T.N Kavitha** has a contribution of Book chapter in ‘Physics and statistics’ with the topic of “ A Statistical Analysis Of Covid -19 Using Data From WHO” , in the record event (Maximum authors contributing for a book on covid- 19 and its impact) held in January 2021 at Chennai, organised by ESN Publication. ISBN: 978-81-947019-4-1.
7. **Dr.T.N. Kavitha** has a contribution of Book chapter in ‘Physics and statistics’ with the topic of “ Lockdown Impact In India” , in the record event (Maximum authors contributing for a book on covid- 19 and its impact) held in January 2021 at Chennai, organised by ESN Publication. ISBN: 978-81-947019-4-1.
8. **Dr.T.N. Kavitha** has a contribution of Book chapter in ‘Physics and statistics’ with the topic of “Collecting and scrutinizing our experimental paired data using R”, in the record event (Maximum authors contributing for a book on covid- 19 and its impact) held in January 2021 at Chennai, organised by ESN Publication. ISBN:978-81-947019-4-1.

9. **Dr.T.N. Kavitha** has a contribution of Book chapter in ‘Physics and statistics’ with the topic of “ New identity in Near idempotent semigroup” , in the record event (Maximum authors contributing for a book on covid- 19 and its impact) held in January 2021 at Chennai, organised by ESN Publication. ISBN: 978-81-950305-3-8

DEPARTMENT ACTIVITIES

1. **First Doctoral Committee Meeting** has conducted for **Mrs. B. Amudha**, Research Scholar on 26.02.2021 through online mode.
2. **First Doctoral Committee Meeting** has conducted for **Mr. K.Saravanan**, Research Scholar on 07-04-2021 through online mode.

SUMMARY OF ACADEMIC ACHIEVEMENTS DURING JANUARY-JUNE 2021

Number of Publications	No.of paper presented in national/international conferences	No. of seminars/workshops etc., attended	No.of outreach activities	Awards received
10	12	62	6	1

Any criticism, opinions and encouragement will be highly appreciated by the editors of the Newsletter