



## DEPARTMENT OF MATHEMATICS

# SRI CHANDRASEKHARENDRA SARASWATHI VISWA MAHAVIDYALAYA (SCSVMV UNIVERSITY)

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

Issue - VIII

January- June 2020

## DEPARTMENT

The department of Mathematics established in 1994, took the role of supporting all B.E/B.Tech, M.C.A and courses. Presently, the department offers B.Sc., M.Sc., and Research Degrees (M.Phil. / Ph.D) programmes in Mathematics.

The department is actively engaged in research in the frontier areas of Mathematics and its applications. Current areas of research of the department includes Algebra, Graph Theory, Queueing Theory, and Operations Research. Interdisciplinary research is also encouraged.

So far more than fifteen Ph.D degrees have been awarded and more than twenty scholars are pursuing research under the department. More than 150 research papers have been published in the last five years.

**GREETINGS FROM THE DEPARTMENT CHAIR**

It is a great pleasure to extend my heartfelt greetings to the readers of the eighth edition of Ganith Vaartha, departmental newsletter. I sincerely hope you will enjoy reading about the accomplishments of our faculty. The Newsletter will be published two times a year. This issue contains the activities about our department from January 2020 to June 2020. I am happy to share that more than 80 percent of our faculty members were awarded Ph.D and two of our faculty members registered their Ph.D. One of the special features of our department is student friendly environment through mentoring and counselling.



Department is regularly organizing workshops, seminars, quality enrichment programs, research colloquiums etc., to be familiar in latest trends in mathematics. Career guidance programmes and skill development courses are introduced for our students to face the competitive world. Department is conducting various competitions such as quiz, paper presentation, oratorical, short film, mathematical modeling etc., to bring out the talents of the students and also our students are encouraged to actively participate in various competitions organized by other departments. The department is actively engaged in research in the frontier areas of Mathematics and its applications.

Although the newsletter format is limited but it can provide in-depth information about our department achievements. Any criticism, opinions, and encouragement will be highly appreciated by the editors of the Newsletter.

*Dr. K. Srinivasa Rao*

**Faculty List**

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

## OUT REACH ACTIVITIES

- **Dr.K.Srinivasa Rao** acted as a Resource Person in Two Days National Workshop on Hands on Computing with MATLAB, organized by the Department of Mathematics, School of Engineering, Presidency University, Bengaluru, during 2-3, January, 2020.



- **Dr.K.Srinivasa Rao** acted as a Resource person in A Six Day Faculty Development Program on MATLAB and Its Applications, organized by the Department of Mathematics, Swaranandhra Engineering College & Technology (Autonomous), Narasapur, A.P., during 8-13, January, 2020.



- **Dr.K.Srinivasa Rao** acted as a Resource person in Value Added Course in MATLAB, organized by the Department of Mathematics, Sir C.R. Reddy College, Eluru, during 24-26, February, 2020.



- **Dr.K.Srinivasa Rao** delivered an Invited talk in National Webinar on Recent Trends in Mathematics, organized by the Department of Mathematics, MVN JS & RVR College of Arts and Science on 22-06-2020.

- **Dr.V.K.Radhakrishnan**, Acted as a Chair Person in the International Conference on Mathematical Computer Science (ICMCE'20) organised by the Department of Mathematics, VIT Chennai Campus on February 21 and 22, 2020.

## Awards Received

- **Dr.R.Malathi**, received the best paper presentation award in the International Conference on Transdisciplinary & Innovative Research in Science (ictirs 2020) organized by Science Department, Thiruvalluvar University, Vellore – 632 115, during 26-28 February, 2020.

## Department Achievements

Staff members of our department presented the research articles in the various International conference organized by various Universities.

1. **Dr.N.Saradha**, presented a paper entitled “Efficient Triple Connected.Com Domination Number of a Graph” in the International Conference on Mathematical Computer Engineering ,VIT University, Chennai during 21-22, February 2020.
2. **Dr.N.Saradha**, presented a paper entitled Secure Triple Connected Two Domination, in the International Conference on Mathematical Computer Engineering ,VIT University, Chennai during during 21-22, February 2020.
3. **Dr.R.Malathi**, presented a paper entitled“Three Valued Logic on Complex Logical Variables” in the International Conference on Transdisciplinary & Innovative Research in Science (ictirs 2020) organized by Science Department, Thiruvalluvar University, Vellore – 632 115, during 26-28 February 2020.
4. **Dr.R.Malathi**, presented a paper entitled“Valid Arguments And Heyting Algebra Using Multi Valued Logic” in the International Conference on Transdisciplinary & Innovative Research in Science (ictirs 2020) organized by Science Department, Thiruvalluvar University, Vellore – 632 115, during 26-28 February 2020.
5. **Dr.R.Malathi**, presented a paper entitled “Laplacian of a diagonal matrix for complete Undirected Graph” in the National Conference on Rising Trends in Mathematical Analysis and Computing Technologies (NCRTMACT-2020) organized by Department of Mathematics, Computer Science and Applications, Sri Malolan College of Arts and Science, Madurantakam-603 306 on 7thFebruary 2020.
6. **Dr.R.Malathi**, presented a paper entitled “Laplacian of a diagonal matrix for complete digraph” in the National Conference on Rising Trends in Mathematical Analysis and Computing Technologies (NCRTMACT-2020) organized by Department of Mathematics, Computer Science and Applications, Sri Malolan College of Arts and Science, Madurantakam-603 306 on 7thFebruary 2020.

7. **Dr.J.Sengamalaselvi**, presented a paper entitled “Introduction of Fuzzy Matrix”, in National Conference on Raising trends in Mathematical Analysis and computer Technologies, Malon college of Arts and Science ,Madurantagham on 7 th February 2020.
8. **Dr.J.Sengamalaselvi**, presented a paper entitled “Application of Triangular Fuzzy Matrix”, in National Conference on Raising trends in Mathematical Analysis and computer Technologies,Malon college of Arts and Science ,Madurantagham on 7 th February 2020.
9. **Dr.V.K.Radhakrishnan**, presented a paper entitled, “Simulation Study on the Queueing Model of Kanchi Kamakshi Temple”, in the International Conference on Mathematical Computer Science (ICMCE’20) organised by the Department of Mathematics, VIT Chennai Campus on February 21 and 22, 2020.
10. **Dr.V.K.Radhakrishnan**, presented a paper entitled, in the National Conference on Recent Developments in Mechanical Engineering and Modern Techniques (NCRDMEMT 2020) organised by Department of Mechanical Engineering, PTLee Polytechnic College, Chennai on 6th March 2020.
11. **A. Dhanalakshmi**, presented a paper entitled,Weighted vertex PI index of Crown and Fan graph”, in the National Conference in Rising trends in Mathematical analysis and computing technologies organized by the Department of Mathematics, Computer Science and Applications, Sri Malolan College of Arts and Science, Madurantakam, on 7 th February 2020.
12. **A. Dhanalakshmi**, presented a paper entitled, “Kekule Indices of some Benzenoid Structures”,in the National Conference in Rising trends in Mathematical analysis and computing technologies organized by the Department of Mathematics, Computer Science and Applications, Sri Malolan College of Arts and Science, Madurantakam, on 7 th February 2020.
13. **K.Bharathi**, presented a paper entitled “Optimal Sequence for Travelling Salesman using Graph Structure”, in the National Conference on Rising Trends in Mathematical Analysis and Computing Technologies held on 7 Feb, 2020 at Sri Malolan College Of Art and Science, Mocheri Road, Madurantakam –603306.
14. **K.Bharathi**, presented a paper entitled “Critical Path Analyzes in the Model of Project Networks”, National Conference on Rising Trends in Mathematical Analysis and Computing Technologies held on 7 Feb, 2020 at Sri Malolan College Of Art and Science, Mocheri Road, Madurantakam – 603306.
15. **Dr.A.Gayathri**, presented a paper entitled, “Weiner Index of Connected Graphs”, in the International Conference on Mathematical Computer Science (ICMCE’20) organised by the Department of Mathematics, VIT Chennai Campus on February 21 and 22, 2020.



### Details of the Publications

1. **R.Malathi**, “Finding Eigen Values For Butterfly Graphs”, in International Journal of Scientific Research in Engineering and Management (IJSREM), Volume 4 Issue 03, March 2020. P.No : 1-5.
2. **R.Malathi**, “Three valued logic on Complex Logical Variables”, in International Journal of Scientific Research in Engineering and Management (IJSREM), Volume 4 Issue 03, March 2020. P.No 1- 3.
3. **R.Malathi**, “Finding Eigen Values for Banana Tree”, in IJSRD - International Journal for Scientific Research & Development, Vol. 7, Issue 12, February 2020, P.No : 686-689.
4. **R.Malathi & T.Venugopal**, “Valid Arguments And Heyting Algebra Using Multi Valued Logic”, in International Journal of Management and Humanities (IJMH), ISSN: 2394 – 0913, Volume-4 Issue-5, January 2020.P.No: 103-108.
5. **Vijayalakshmi. D, Divya. K**, “Distance Adjacency Matrix with Shortest Path and Protein Similarity/Dissimilarity”, in Journal of Xi’an University of Architecture & Technology, Volume XII, Issue V, 2020, P.No.2474 – 2478.
6. **Dr.V.K.Radhakrishnan**, "Distribution of Bunch of Bananas with the Stem through Monte-Carlo Simulation Technique", in Test Engineering and Management Journal, Volume. 82, Feb 2020, P.No. 9176-9185.
7. **K.Bharathi**, “Optimal Sequence for Travelling Salesman using Graph Structure”, in International Journal of Scientific Research in Engineering and Management (IJSREM), ISSN: 2582-3930, April -2020,Volume: 04 Issue: 04 ,1-6,
8. **T.N.Kavitha**, “Bootstrap Hypothesis Test For Test The Effect Of Memory Test Training(Using Our Traditional Methods) Using R”, in Journal of Xi’an University of Architecture & Technology, May 2020 Volume XII, Issue V, Page No: 2729-2735.
9. **T.N. Kavitha**, “A Statistical Comparison of the Hygiene Behaviors for 152 Countries using R”,in Test Engineering & Management Journal, April 2020,Volume 83, Page Number: 16259–16263.
10. **Gayathri.A, et al**, “Removal of acid violet 49 and acid red 88 dyes from aqueous solutions using advanced oxidation process”, in Materials Today: Proceedings, Volume 24, Jan 2020, P.No.1011-1019.

### SUMMARY OF ACADEMIC ACHIEVEMENTS DURING JANUARY-JUNE 2020

Number of Publications	No.of paper presented in National/International Conferences	No.of outreach Activities	Awards Received
10	15	5	1

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