



DEPARTMENT OF MATHEMATICS

SRI CHANDRASEKHARENDRASARASWATHI VISWAMAHAVIDYALAYA (SCSVMV)

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

Enathur, Kanchipuram-631561.

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GANITH VAARTHA

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ABOUT THE DEPARTMENT

The Department of Mathematics, established in the year 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 Ph.D (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 14 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 faculty team of 14 doctorates. So far 34 Ph.D degrees have been awarded and 5 scholars are pursuing research under the department. The focus on research promotes the publications and 310 research papers were published in the last ten years.

GREETINGS FROM DEPARTMENT CHAIR

It is a great pleasure to extend my heartfelt greetings to the readers of the Fourteenth edition of Ganith vaartha, 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, 2023. 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.



FACULTY TEAM

S.No.	Name	Designation	Area of Specialization
1.	Dr. D. Vijayalakshmi	Assistant Professor & Head	Graph Theory
2.	Dr. K. Srinivasa Rao	Professor	Algebra
3.	Dr. N. Saradha	Assistant Professor	Graph Theory
4.	Dr. P. Nagarajan	Assistant Professor	Queuing Theory
5.	Dr. P. Balaji	Assistant Professor	Petri Nets
6.	Dr. E. Geetha	Assistant Professor	Fluid Dynamics
7.	Dr. R. Mageswari	Assistant Professor	Graph Theory
8.	Dr. K. Pramila	Assistant Professor	Fuzzy Set Theory
9.	Dr. A. Gayathri	Assistant Professor	Mathematical Physics
10.	Dr. J. Sengamalaselvi	Assistant Professor	Applied Mathematics using ICT
11.	Dr. V. K. Radhakrishnan	Assistant Professor	Operations Research
12.	Dr. A. Dhanalakshmi	Assistant Professor	Graph Theory
13.	Dr. K. Bharathi	Assistant Professor	Operations Research
14.	Dr. T. N. Kavitha	Assistant Professor	Algebra

PROGRAMMES ORGANIZED BY THE DEPARTMENT

INTERNATIONAL MATHEMATICS DAY (IMD 2023)
MARCH 27, 2023

The Department of Mathematics celebrated International Mathematics day IMD 2023 on 27 th March 2023. The program started with a Prayer song by Ms. L. Anjana, II M.Sc., mathematics continued by the Welcome address by Ms. B. Sneha, II M.Sc., Mathematics. Prof. Dr. K. Venkatramanan, Dean, Faculty of Science, the chief guest of the program felicitated the gathering. Prof. Dr.K.Srinivasa Rao, Professor of Mathematics, delivered a Lecture on “Application of Mathematics in day-to-day life.” This program is mainly organized to create interest among the students in the field of Mathematics for Arts, Education, Science and Engineering students of SCSVMV. Various events were conducted prior to the program from 20.03.2023 to 24.03.2023 and the details of events conducted, the student participation are listed below:

Events	Event Organizers	Judges of the event	No. of Students Participated
Power point Presentation	Dr.P.Nagarajan Dr.J.Sengamalaselvi	Prof.T.Nirmarraj[CSA] Prof.V.Balu[CSE]	11
Debate	Dr.E.Geetha	Prof.M.Sudarajan[Phy] Prof.Bindu[Eng]	28
A minute in Math (Speak about maths)	Dr.N.Saradha Dr.P. Balaji	Prof.K.Srinivasa Rao Prof. V.Santhanam[Che]	21
Poster Presentation	Dr.V.K.Radhakrishnan	Dr.K.Sivakumar[Che] Dr.R.Raja[Phy]	6
Quiz	Dr.K. Pramila Dr.A.Dhanalakshmi	-	72
Dumb Charades	Dr.R.Mageswari Dr.T.N.Kavitha	-	47

Faculties from various departments were invited to judge the events and the results were announced then and there at the end of each event. Dr.A.Gayathri and Dr.K.Bharathi organized the event. During the Valedictory function, Prof. Dr. K. Venkatramanan, Dean Faculty of Science, and Prof. Dr. K. Srinivasa Rao, Professor, Department of Mathematics distributed the certificates to

the Prize winners. The top scorers in semester examination (2022- 2023 odd semester) of the Mathematics Department were appreciated in the program. This program came to an end in a grand manner with the vote of thanks proposed by P. Sathiya, III-B.Sc Mathematics.



DEPARTMENT ACTIVITIES

1. **Second Doctoral Committee Meeting** conducted for **Mr. K.Saravanan**, Research Scholar on 20.04.2023 through online mode.
2. **Second Doctoral Committee Meeting** conducted for **Mrs. B. Amudha**, Research Scholar on 19-06-2023.

EXTENSION PROGRAMMES

- **Dr.K. Srinivasa Rao**, delivered an invited talk at the National Conference on

- Multidisciplinary Academic Research and Innovation, organized by the Department of Applied Mathematics, Sri Padmavati Mahila Visvavidyalayam, Tirupati, 3-4, February 2023.
- **Dr.K. Srinivasa Rao**, delivered an invited talk at the International Conference on Recent Trends in Mathematical Sciences, organized by the Post Graduate Department of Mathematics, Swami Vivekanand Govt. Post Graduate College, Neemuch, Madhya Pradesh, 10-11, February 2023
 - **Dr .K. Srinivasa Rao**, delivered a talk on Applications of Mathematics in Day-to-Day Life, on the eve of International Mathematics Day celebrations held on 27-03-2023 at the Department of Mathematics, Sri ChandrasekharendraSaraswathi Viswa Mahavidyalaya, Kanchipuram.
 - **Dr .K. Srinivasa Rao**, acted as a resource person in National Workshop on Numerical Computations Using MATLAB, organized by the Department of Mathematics, Sardar Patel College, Hyderabad, on 11-05-2023.
 - **Dr. P.Balaji** invited as Member of BOS Meeting at Sri Manakula Vinayagar Engineering College, Pudhucherry on 22.3.2023.
 - **Dr. R.Mageswari**, delivered an invited Lecture on Numerical Error Analysis at Sri Sankara Bhagavathi Arts and Science College, Kommadikottai, Thuthukudi District on 31.01.2023.
 - **Dr.A.Gayathri** acted as a Resource person in the “Introduction on Vedic Mathematics-The fastest Ancient Indian Calculating System”, organized by Internal Quality Assurance Cell (IQAC), SCSVMV, on June 10, 2023.

JOURNAL PUBLICATION

- **N.Saradha**, “Acyclic Distance 2 Domination Number of a Graph”, Gis science Journal Volume 10 issue 6 June 2023, 1225-1229.
- S.Sarala, **E.Geetha**, M.Mageswari, M.Radha Madhavi, “Effects of Heat and Mass transmission with radiation on MHD nanofluid flow past over an oscillating plate using Chemical reaction”, AIP Conference Proceedings, 2707, 030011-1–030011-14; May 2023.
- **Gayathri A**, et al “Comparative Evaluation of Viscosity, Density and Ultrasonic Velocity Using Deviation Modelling for Ethyl-Alcohol Based Binary Mixtures”, Appl. Sci. June 2023, 13, 7475.
- **T. N. Kavitha**, has published a paper titled “Left(Right)Regular Near – Idempotent Semigroups” in the proceedings of 12th National Conference on “Emerging Trends in Computer science” organized by Pattammal Alagesan college of arts and science during 13th of April 2023. ISBN: 978-93-5891-279-1.
- **J.Sengamalaselvi**, “ Application of Fuzzy Membership Value Matrix” International Journal of Advanced Research in science communications and Technology(IJARST) ,ISSN 2581-9429, Vol (3) issue 2 Feb 2023 , pp 416-423.

PAPER PRESENTATION BY FACULTIES

- **Dr. K. Srinivasa Rao**, presented a paper entitled “ Degree-Based Topological Indices of

- Triangulane” at the International Conference on Discrete Mathematics and Graph Theory, organized by the Department of Mathematics, Vidyavardhaka College of Engineering, Mysuru, Karnataka, 8-10, June 2023.
- **Dr. K. Srinivasa Rao**, presented a paper entitled “ Maximum Degree Energy of Shadow Graphs”, at the International Conference on Recent Trends in Mathematical Sciences, organized by the Department of Mathematics, Swami Vivekanand Govt. P.G.College, Neemuch (M.P), 10-11, February 2023
 - **Dr. K. Srinivasa Rao**, presented a paper entitled “Some Selected Topological Indices of Oxide Networks ”, at the National Conference on Multidisciplinary Academic Research and Innovations, organized by the Department of Applied Mathematics, Sri Padmavati Mahila Visvavidyalayam, Tirupati, 3-4, February, 2023.
 - **Dr.N.Saradha**, presented a paper entitled “Strong co- efficient triple connected domination of a graph” presented at International Conference on Recent Trends In Applied Mathematics, Loyola college, Chennai, February 24-25, 2023.
 - **Dr. A.Gayathri** presented a paper titled “Determination of Physico-Chemical characteristics of Organic liquid using Redlich-Kister Co-efficients” in International Conference on Recent Trends on Applied Mathematics (ICRTAM 2023), organized by the Department of Mathematics, Loyola College, Chennai during Feb 24-25, 2023.
 - **Dr. A.Gayathri** presented a paper titled “Theoretical and Experimental expectations of Viscosity and Ultrasonic velocity in binary liquid mixtures of Cyclohexane with Isopropyl Acetate or Isobutyl acetate - A Comparative Study” in International Conference on Advanced Materials (ICAM 2023), organized by Department of Chemistry, Women’s Christian College, Chennai, during Feb 21-22, 2023.
 - **Dr Radhakrishnan V K**, presented a paper entitled “A Comprehensive Study of AI Techniques and their impacts on Optimisation and Decision-Making “at the International Conference on Modelling, Simulation, and Optimisation Energy Systems (MSOES’23) in Online Mode, held at Canadian University, Dubai, UAE, organised by Canadian University Dubai, UAE, in conjunction with United Arab Emirates University, Al Ain, UAE, and Dr.B.R. Ambedkar National Institute of Technology, Jalandhar, Punjab, India during June 17 and 18, 2023.
 - **Dr. A.Dhanalakshmi**, presented a paper titled K-Banhatti Indices of trees” at the 12th National Conference on Emerging Trends in Computer Science organized by Pattammal Alagesan College of Arts & Science, Athur, Chengalpattu on 13.04.2023.
 - **Dr. T. N. Kavitha**, presented a paper titled “Left(Right)Regular Near – Idempotent Semigroups” at the 12th National Conference on “Emerging Trends in Computerscience” organised by Pattammal Alagesan college of arts and science during 13th of April 2023.
 - **Dr. J.Sengamalaselvi**, presented a paper entitled “ Solitication of Fuzzy Membership Matrix “in the 12 th National conference on emerging Trends in Computer sciences organized by Pattamal Alagesan college of Arts and Science, Athur, Chengalpet on 13.04.2023

BOOKS PUBLISHED BY THE FACULTY MEMBER

- **Dr.A.Gayathri**, published a book titled “Complex Analysis”, by Velavan Publication, June 2023, with ISBN 978-81-958006-0-5.

STUDENT ACTIVITIES

- **Anjana SreeNithya** of II M.Sc. Maths presented a paper titled “Some Degree Based Topological Indices of Oxide Network” in the National Conference on Multidisciplinary Academic Research and Innovation at Sri Padmavati Mahila Visvavidyalayam, Tirupati on 03-02-2023.
- **Sneha B** of II M.Sc. Maths presented a paper titled “Theoretical and Experimental expectations of Viscosity and Ultrasonic” in the International Conference on Advance Materials (ICAM 2023) at Women’s Christian College, Chennai on 21/02/23 and 22/02/23.
- **Sneha B** of II M.Sc. Maths presented a paper titled “Determination of Physico-Chemical characteristics of Organic liquid using Redlich-Kister Co-efficients” in the International Conference on Recent Trends on Applied Mathematics (ICRTAM 2023) organized by Department of Mathematics, Loyola College, Chennai on Feb 24-25, 2023.
- **Kanchadhala A K** of II M.Sc. Maths presented a paper titled “K-Banhatti Indices of trees” in the 12th National Conference on Emerging Trends in Computer Science at Pattammal Alagesan College of Arts & Science, Athur, Chengalpattu on 13.04.2023.

SUMMARY OF ACADEMIC ACHIEVEMENTS

DURING JANUARY 2023 - JUNE 2023

Number of Publications	No. of paper presented in national / international conferences	No. of seminars / workshops etc., attended	No. of outreach activities	Awards received	Online certificate course
5	10	30	6	-	-