Sri Sai Ram Engineering College Department Of Humanities and Sciences

Name: Dr. S. Ramakrishnan



| Designation: | Professor, Department of Mathematics |
|---------------------------------------|--------------------------------------|
| Qualification: | M.Sc., M. Phil., Ph.D., PGDIT |
| | Cleared CSIR-NET (June 2011) |
| | (Secured 42 nd rank) |
| Area of Specialization: | Functional Analysis |
| | Chemical Graph Theory |
| Experience : | Teaching: UG: 29 years |
| | PG: 22 years |
| | Industry: 2 years |
| No. of Workshops / Conferences / FDPs | 29 |
| attended: | |
| Online Courses completed: | 19 |

| Publication: | Journals | | | |
|---------------------|---------------------------------------------|--|--|--|
| | National : NIL | | | |
| | International : 5 | | | |
| | Conferences | | | |
| | National : 5 | | | |
| | International : 7 | | | |
| Research Guidance: | NIL | | | |
| General: | Life Member of ISTE (LM30502) | | | |
| | Life Member of AMTI (L02043) | | | |
| | Member of IEEE (98395417) | | | |
| | Member of College Accreditation and ISO | | | |
| | Committee. | | | |
| Staff Achievements: | Received "The Best Professor" Educationist | | | |
| | Teacher's day award – 2013 from Education | | | |
| | Today. | | | |
| | Received a Merit Certificate from Lions | | | |
| | Club of Madras Metropolitan South on the | | | |
| | Occasion of Teachers Day Celebrations 2006. | | | |

Educational Qualification:

| Category | Name of the Degree | Specialization | Year of Passing | Name of the College | Name of the University | % of Marks / Grades obtained | Class obtained |
|-----------|--------------------------|---------------------------------------|--------------------|-------------------------------|------------------------------|---------------------------------------|-------------------|
| UG | B.Sc. | Mathematics | 1986 | Loyola College | Madras University | 63% | I |
| PG | M.Sc. | Mathematics | 1988 | RKM Vivekananda College | Madras University | 58% | II |
| PG | M. Phil. | Functional Analysis Mathematics | 1990 | RKM Vivekananda College | Madras University | 68% | I |
| Doctorate | Ph.D. | Chemical Graph Theory | 2016 | Anna University | Anna University | | |

Academic Experience: As on 31.07.2022

| Name of the | Designation | Joining Date | Relieving Date | Experience | | |
|---------------------------------------|------------------------|-----------------|-------------------|------------|--------|------|
| College | | | | Years | Months | Days |
| Guru Nanak College (Evening) | Lecturer | 01-11-1993 | 30-06-1995 | 1 | 7 | 30 |
| Sri Sai Ram Engineering College | Lecturer | 02.07.1995 | 31-12-1998 | 3 | 5 | 30 |
| | Senior Lecturer | 01-01-1999 | 31-07-2004 | 5 | 6 | 31 |
| | Assistant Professor | 01-08-2004 | 31-07-2009 | 4 | 11 | 31 |
| | Associate Professor | 01-08-2009 | 31-07-2010 | 0 | 11 | 31 |
| | Professor | 01-08-2010 | Till Date | 12 | 0 | 0 |
| Total | | | | 28 | 09 | 0 |

Publications

Journals:

1. **"Topological Indices and New Graph Structures",** Applied Mathematical Sciences, Vol. 6, 2012, No. 108, 5383-5401. www.m-hikari.com/ams/ams-2012/ams-105-108-2012.pdf

- 2. "Topological indices of molecular graphs under specific chemical reactions", International Journal of Computing Algorithm, vol.2, 2013, pp. 224-234. DOI: https://doi.org/10.20894/ijcoa.101.003.001.014
- 3. **"Degree Distance of Some Planar Graphs"**, International Journal of Computing Algorithm, vol.3, 2014, pp.541-544.

DOI: https://doi.org/10.20894/ijcoa.101.003.001.014

- 4. **"Gutman and Schultz indices for nanostar dendrimer"**, Journal of Computational and Theoretical Nanoscience, vol.12, no. 12, 2015, pp. 5449-5456. DOI: https://doi.org/10.1166/jctn.2015.4545
- 5. **"Schultz and Gutman indices for graph complements"**, International Journal of Pure and Applied Mathematics, vol.105, no.3, 2015, pp.383-392. DOI: http://dx.doi.org/10.12732/ijpam.v105i3.6

Google Scholar Citations: 49, h-index: 4, i10-index: 2

Conference Proceedings:

- 1. **"Schultz and Gutman index of rooted Product of graphs",** Proceedings of the International Conference on Mathematical Computer Engineering 2015 organized by the Division of Mathematics, School of Advanced Sciences, V.I.T. Chennai, 14 -15 December 2015.
- 2. "Modified Schultz index of Chain and Bridge graphs", National Conference on Emerging Trends in Graph Connections (NCETGC 2014) organized by Department of Mathematics, University of Kerala, Kariavattom, Thiruvananthapuram during 8 10 January 2014.
- 3. "**Degree distance of Chain and Bridge graphs**", Proceedings of the International Conference on Mathematical Computer Engineering 2013 organized by the Division of Mathematics, School of Advanced Sciences, V.I.T. Chennai, 29 30 November 2013, 267 274.
- 4. "Degree distance of some planar graphs" Proceedings of the International Conference on Computational Mathematics ICCM 2013 organized by PG & Research Department of Mathematics, Loyola College, Chennai 3 5 October 2013, International Journal of Computing Algorithm, Vol. 3, February 2014, 541 544.
- 5. "Schultz and modified Schultz indices of Specific graphs", Proceedings of the National Conference on Recent Advances in Mathematical Analysis and Applications organized by Department of Mathematics, K. S. Rangasamy College of Arts and Science (Autonomous), Tiruchengode 6 7 September 2013, 177 188.
- 6. "Multiplicative Zagreb indices for Molecular Graphs" in the National Symposium on Mathematical Methods and Applications NSMMA 2012 organized by Department of Mathematics, IIT Madras, 22nd December 2012.

- 7. **"Topological index for Complex Molecular Graphs"**, Seventh Indo-US Workshop on Mathematical Chemistry Jointly organized by Prist University, Thanjavur and University of Minnesota Duluth, 4-6 December 2012.
- 8. 'Topological Indices of Molecular Graphs under Specific Chemical Reactions", Proceedings of the International Conference on Bioinformatics, Computational Biology IC-BCB organized by Department of Mathematics, Loyola College, Chennai on the occasion of Fr. Racine International Mathematics Congress, 23 25 July 2012.
- 9. **"Zagreb Indices and Coindices for Compound Graphs"**, Proceedings of the International Conference on Mathematical and Computational Models, ICMCM-2011 organized by Department of Mathematics and Computer Applications, PSG College of Technology, 19-21 December 2011, Narosa Publishing House, 357 362.
- 10. "Topological Indices for Graphs and Chemical Reactions", Proceedings of the International Conference on Mathematics and Computer Science, ICMC -2011 organized by PG & Research Department of Mathematics, Loyola College, Chennai, 7-8 January 2011, 81 88.
- 11. "Topological Indices and Transformation of Molecular Graphs", National Symposium on Mathematical Methods and Applications NSMMA 2010 organized by Department of Mathematics, Indian Institute of Technology Madras on 22nd December 2010.
- 12. "Topological Indices of Triangle Free Graphs with Maximal Edges", Proceedings of National Conference on Recent Trends in Advanced Mathematics -NCRTAM -2010 organized by Department of Mathematics, Easwari Engineering College on 15th October 2010, 129 141.

Workshops Attended:

- 1. Advanced Training in Mathematics Workshop on "**Combinatorics and Graph Theory**" organized by Department of Mathematics, University of Pune in association with National Board of Higher Mathematics, Govt. of India during 12-17, December 2011.
- 2. "**Teaching Technology and Counseling skill**" conducted by Abirami Academy on 24th February 2001.
- 3. Three-day intensive workshop on "**Finite Element Methods**" organized by Department of Mathematics, V.I.T., Vellore during 16 18 November 2000.

FDP's Attended:

- 1. Attended Online Orientation Training Programme for mentors organized by NITTTR, Chennai during 05.07.2021 to 09.07.2021.
- 2. Attended and successfully completed AICTE Training and Learning (ATAL) Academy online FDP on "Blended Learning and Flipped Classroom" from 31-8-2020 to 4-9-2020 at NITTTR, Chandigarh, Score: 93.3%.
- 3. Attended and successfully completed AICTE Training and Learning (ATAL) Academy online FDP on "Learning Management System" from 21-9-2020 to 25-9-2020 at NITTTR, Chennai, Score: 91%.
- 4. Attended and successfully completed AICTE Training and Learning (ATAL) Academy online FDP on "Online Teaching and Learning Technologies" from 17-8-2020 to 21-8-2020 at MNNIT, Allahabad, Score: 83.3%
- 5. Attended ISO 9001:2015 Quality Management System and Audit Training conducted by Creative Management Consultants on 8th June 2018.
- Attended Faculty Development Program on NEXT GEN Teaching Methodology (Let's Make a Change) held at Sri Sairam Engineering College during 20 – 21 January 2018. Resource Person: Mr. Sujith Kumar, Maatram Foundation & Location Head – HR, Infosys Ltd.
- 7. Attended Faculty Development Program on "Cloud Computing" organized by Department of Information Technology in association with Tata Consultancy Services at Sri Sairam Engineering College on 5th May 2014.
- 8. Attended ISO 9001:2008 Quality Management System and Audit Training conducted by Creative Management Consultants during 11 12 October 2011.
- 9. National Seminar on "Graph Theory and its Applications" organized by the Department of Mathematics Meenakshi College for, Women, Chennai, 8th September 2010.
- 10. Staff development programme on Industrial Design and Delivery organized by the Department of Computer Science and Engineering, Sri Sai Ram Engineering College, Chennai.
- 11. Two-day International Conference on Computers, Controls and Communications INCONCCC, Sri Sai Ram Engineering College, August 2004.
- 12. One day training program for "Internal Quality Auditor" conducted by Management Consultants, 10th May 2003.
- 13. Participated in the International Conference on Operations Research for Development (ICORD2002) organized by the Department of Industrial Engineering, Anna University, 27-30 December 2002.

14. One day seminar on "Application of Mathematics in Engineering" organized by Department of Applied Science & Humanities, M.I.T., Anna University, Chennai, 30th September 1999.

NPTEL / Swayam / NITTTR Online courses completed:

- 1. **Introduction to R software**, July Sept 2017 (8 -week course), consolidated score: 99%
- 2. **Constrained and Unconstrained Optimization**, July Oct 2017 (12-week course), consolidated score: 90%
- 3. **Numerical Linear Algebra**, Jan April 2018 (12-week course), consolidated score: 77%
- 4. **Problem Solving through Programming in C**, Jan April 2018 (12-week course), consolidated score: 92%
- 5. **The Joy of Computing using Python**, July Oct 2018 (12-week course), consolidated score: 93%
- 6. **Matrix Analysis with Applications**, Aug Sept 2018 (8 week course), consolidated score: 73%
- 7. **Probability and Statistics**, Jan April 2019 (12-week course), consolidated score: 81%
- 8. **Programming in Java**, Jan April 2019 (12-week course), consolidated score: 83%
- 9. **Discrete Mathematics**, Jan April 2019 (12-week course), consolidated score: 75%
- 10. **Mathematical Finance**, Jul Oct 2019 (12-week course), consolidated score: 69%
- 11. **An Introduction to Programming through C++**, Jul Oct 2019 (12-week course), consolidated score: 85%
- 12. Differential Calculus, Jul Oct 2019 (12-week course), consolidated score: 91%
- 13. Linear Algebra, Jan Apr 2020 (12-week course), consolidated score: 95%
- 14. **Data Analytics with Python**, Jan Apr 2020 (12-week course), consolidated score: 93%
- 15. **Programming Fundamentals**, online non-credit course authorized by Duke University and offered through Coursera.
- 16. Module 1 **Orientation towards Technical Education and Curriculum Aspects,** online course offered by NITTTR. Score: 89%
- 17. Module 2 **Professional Ethics and Sustainability**, online course offered by NITTTR, Score: 86.6%

- 18. Module 3 **Communication Skills, Modes & Knowledge dissemination**, online course offered by NITTTR, Score: 84.3%
- 19. Module 4 **Instructional Planning and Delivery**, online course offered by NITTTR, Score: 86.7%