# Curriculum Vitae

#### Dr.K.Srinivasa Rao

Controller of Examinations Professor of Mathematics Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya Enathur, Kanchipuram Tamilnadu,India

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#### **Educational Qualifications:**

- Ph.D in Mathematics, Acharya Nagarjuna University, Guntur, Andhra Pradesh, India.
- M.Phil. (Mathematics), M.K. University, Madurai.
- Post Graduate Diploma in Computer Science (PGDCS), University of Hyderabad, Hyderabad.
- M.Sc., Jawaharlal Nehru Technological University, Hyderabad.

## Professional Experience:

- At present working as a Professor of Mathematics at Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram, Tamilnadu since 02-07-2012.
- Worked as a Principal of Harshavardhana P G College of Computer Science, Cherukupalli, Guntur District during the period 20-05-2010 to 29-06-2012.

- Worked as a Professor and Head of the Department of Science and Humanities at Adam's Engineering College, Paloncha, Khammam District, Andhra Pradesh during the period 1999-2010.
- Taught Discrete Mathematics & Probability and Statistics subjects at University College of Engineering, Kakatiya University, Kothagudem as a Guest Lecturer for M.C.A students during the period 20th November 2003 to March 2010.
- Worked as a Lecturer at M.V.N.J.S & R.V.R. Degree College, Malikipuram, East Godavari Dist during the period 1998-1999
- Worked as a Lecturer at S.N.Raju Jr. College, Gudimellanka, East Godavari District, during the period 1996-1998
- Worked as a Lecturer at Margadarshi Junior College, Karimnagar, Karimnagar District, during the period 1993-1996

#### **Journal Publications**

- Venkateswara Rao. J, Srinivasa Rao. K, Nageswara Rao. T, Srinivasa Rao, R. V.N. Exploring Pre A\*-Algebra as a New Paradigm, International Journal of Systemics, Cybernetics and Informatics, Jan 2009, pp14-19
- Venkateswara Rao. J and Srinivasa Rao. K, Pre A\*-Algebra as a Poset, African Journal of Mathematics and Computer Science Research, Vol.2 (4). May 2009, pp 073-080 https://academicjournals.org/journal/AJMCSR/article-abstract/ 18A03F44309
- 3. Venkateswara Rao. J and Srinivasa Rao. K, Congruence on Pre A\*-Algebra, Journal of Mathematical Sciences (An International Quarterly Periodical of Science), Vol. 4, Issue 4, November 2009, pp295-312
- 4. Srinivasa Rao.K and Venkateswara Rao.J, Cayley's Theorem on Centre of a Pre  $A^*$  Algebra, International Journal of Computational and Applied Mathematics, Volume 5 Number 1 (2010), pp. 103–111
- 5. Srinivasa Rao.K, Venkateswara Rao.J and A.Satyanarayana, Pre  $A^*$ -Modules and If-Then-Else Algebras Over Pre  $A^*$ -Algebras, International Journal of Systemics, Cybernetics and Informatics, Jan 2010, pp11-15

- Srinivasa Rao.K, Venkateswara Rao.J and A.Satyanarayana, Some Structural Compatibilities of Pre A\*-Algebra, African Journal of Mathematics and Computer Science Research, Vol.3(4), pp 54-59, April 2010. https://academicjournals.org/journal/AJMCSR/article-abstract/C73074E8852
- 7. Venkateswara Rao.J, Srinivasa Rao.K. Kalyani.D. Decomposistion of Pre  $A^*$ -Algebra, International Journal of Mathematical Sciences and Applications, Vol. 1 No. 1, January, 2011
- 8. Srinivasa Rao. K, Venkateswara Rao, On Pre $A^*\text{-}Algebras,$  Mathematical Sciences, International Research Journal, Volume-I, Issue , pp 56-62, September, 2012
- 9. Vijayalakshmi.D, Srinivasa Rao.K, Siva Kumar.K, Proteins-Graph Theoretical Model Using Beta Turn Structure, International Journal of Computing Algorithm, Volume: 03, February 2014, Pages: 638-641
- Vijayabarathi.S. Srinivasa Rao.K, "Boolean Algebras of Pre A\*-Algebra", International Jouranla of Mathematics Trends and Technology, Volume 7, Number 1, March 2014, page 61-67. https://ijmttjournal.org/archive/ijmtt-v7p509
- 11. Vijayabarathi.S. Srinivasa Rao.K, Cayley Theorem for Centre of C-Algebra, International Journal of Mathematical Archive, 5(3), March 2014, page 18-26. http://www.ijma.info/index.php/ijma/article/view/2746
- 12. Dhanalakshmi.A, Srinivasa Rao.K, Shivakumar.K, Estimation of Molecular Descriptors of the Fullerene Using Adjacency Matrix. Mathematical Sciences International Research Journal, Volume 3, Issue 2(2014), pages: 624-627.
  - https://drive.google.com/file/d/1wQEI6WDIb69m2Z-eHy760PWL8\_tUj\_5c/view
- 13. Mageswari.R, Srinivasa Rao.K, Shivakumar.K, Protein Similarity/Dissimilarity Using Contact Map and Matching Index, Mathematical Sciences International Research Journal, Volume 3, Issue 2(2014), pages: 672-676.

- https://drive.google.com/file/d/1NSlkshFndF7G7EBqsaSMk4jEp-eZEaFF/view
- 14. Dhanalakshmi.A, Srinivasa Rao.K, Shivakumar.K, Characterization of  $\alpha$ -Cyclodextrin Using Adjacency and Distance Matrix, Indian Journal of Science, International weekly journal of science, 12(35), 78-83
- 15. Mageswari.R, Srinivasa Rao.K, Shivakumar.K, Prediction of Hydrophobic Core Using Contact Map and Minimal Connected Dominating Set, Indian Journal of Science, International weekly journal of science, 2015,13(37), 24-28.
- 16. Srinivasa Rao.K., Topological Indices of Cyclic Structures with Benzene Rings, International Journal of Applied Engineering Research, Vol.10 No.80m (2015) Page.No.253-256.
- 17. A.Dhanalakshmi, K.Srinivasa Rao, K.Shiva Kumar, Hosoya, Schultz, Modified Schultz Polynomials and their Related Indices of  $\alpha$ -Cyclcodextrin, International Journal of Scientific and Innovative Mathematical Research, Volume-3, Special Issue-4, November 2015, Page No. 83-90
- 18. Vijayabarathi.S. Srinivasa Roark, Birkoff Centre of a Pre A\*-Algebra, International Journal of Scientific and Innovative Mathematical Research, Volume 3, Special Issue1, July 2015, page 369-375,
- 19. Vijayabarathi.S, Srinivasa Rao.K. Pre  $A^*$ -Algebra Functions, Journal of Harmonized Research in Applied Sciences, 2016, 4(2), page: 93-97.
- 20. A.Kanchana, K.Srinivasa Rao, Solution of yystem of Boolean equation to give the input of the circuit, Journal of Chemical and Pharmaceutical Sciences, vol.9,Issue,4, 2016, page: 2231-2234
- 21. A.Kanchana, K.Srinivasa Rao, Identifying the problem in motorcycle using Boolean functions, International Journal of Information Research and Review, 2016, Vol.3, Issue 11, pp. 3160-3167
- 22. G.Vijayalakshmi, L.Anand Babu, K.Srinivasa Rao, Joule Heating and Viscous Dissipation Effects on MHD boundary layer flow and Heat Transfer Over an Exponentially Stretching Sheet Embedded in a Thermally Stratified Medium, International Journal of Advancement in Engineering Technology, Management and Applied Science, Vol.3-Issue 12, Dec,2016, pp133-147.

- 23. D.Vijayalakshmi, K.Srinivasa Rao, Similarity/ Dissimilarity study of protein using secondary structure element and kernel function, Advances in Natural and Applied Sciences, Vol.2016 Oct special 10(14), pages:65-71
- 24. A.Dhanalakshmi, K.Srinivasa Rao, K.Shiva Kumar, Wiener Index of the polycyclic aromatic hydrocarbons using distance matrix and cut method, Global Journal of Pure and Applied Mathematics, Vol.12, No.3(2016), pp.no. 496-501
- 25. A.Kanchana, K.Srinivasa Rao, Minimizing cost problem solved by Boolean function using switch circuit, Global Journal of Pure and Applied Mathematics, Vol.13, Number 1(2017), pages: 287-290 https://www.ripublication.com/Volume/gjpamv13n1spl.htm
- 26. R.Mageswari,K.Srinivasa Rao, K.Sivakumar, Identifying similarity/dissimilarity between proteins through their contact maps and matching index, Global Journal of Pure and Applied Mathematics, Vol.13, Number 1(2017), pages: 233-237 https://www.ripublication.com/Volume/gjpamv13n1spl.htm
- 27. G.Vijayalakshmi, L. Anand Babu, K.Srinivasa Rao, Heat and Mass transfer in MHD stagnation point Nanofluid flow over stretching sheet in porous medium with Chemical Reaction and Prescribed surface heat flux, International Journal of Computer & Mathematical Sciences, Volume 6, Issue 7, July 2017, pp.no 1-10
- 28. Vijayabarathi.S, K.Srinivasa Rao, Significance of Pre A\*-Sub algebra, International Journal of Current Research Review, Vol.9, issue 10, May 2017 https://www.ijcrr.com/abstract.php?article\_id=1157
- 29. Vijayalakshmi, Srinivasa Rao. K, Protien Similarity/Disimilarity using Modified Weisfeiler Algorithm and Minimum Distane Sub-Graph, Mathematical Sciences International Research Journal, Vol. 6, Special Issue 1, 2017,53-57 https://www.imrfjournals.com/msirj6s
- 30. D.Vijayalakshmi, K.Srinivasa Rao, DD matrix with least positive Eigen value and protein similarity, International Journal Pure and Applied

- Mathematics, Vol.115, No.9, 2017, pp. 331-342 https://acadpubl.eu/jsi/2017-115-9/articles/9/29.pdf
- 31. R.Mageswari, K.Srinivasa Rao, K.Sivakumar, Estimation of protein packing density from protein contact map, International Journal Pure and Applied Mathematics, Vol.115, No.9, 2017, pp. 417-424 https://acadpubl.eu/jsi/2017-115-9/articles/9/38.pdf
- 32. R.Mageswari,K.Srinivasa Rao, K.Sivakumar, Graph Algorithm for Accessible Surface Area of an Atom Using the Properties of Trees, Global Journal of Pure and Applied Mathematics, Volume 13, Number 5 (2017), pp:329-335 https://www.ripublication.com/Volume/gjpamv13n5spl.htm
- 33. A.Kanchana, K.Srinivasa Rao, Distinct Minimized Equation from Unique Boolean Function in Simple Truth Table Logic, International Journal of Pure and Applied Mathematics, Volume 116,No.23, 2017,page: 115-119.
  - https://acadpubl.eu/jsi/2017-116-23-24/articles/23/16.pdf
- 34. D. Tabhita, K.Srinivasa Rao, P. Vijaya Vani, A Study on Class of Lattice Ordered Recursively Enumerable and Recursive Languages, Mathematical Sciences International Journal, Volume7(2018), Spl issue 5, pp.no.139-147 https://www.imrfjournals.com/msirj7s5
- 35. D. Tabhita, K.Srinivasa Rao, P. Vijaya Vani, A Study on Lattice Ordered Finite Automata, Mathematical Sciences International Journal, Volume6(2017), Spl issue, pp.no.356-364S https://drive.google.com/file/d/1x8GKri1SfYEUiplbRVfgjCilTZMJln7w/view
- 36. Kanchana A and Srinivasa Rao .K, Software approach to minimize Boolean function as *n* distinct functions, Journal of Advance Research in Dynamical & Control Systems, Volume 10, Issue 07(2018),129-136. https://www.jardcs.org/backissues/abstract.php?archiveid=4882
- 37. A.Kanchana, K.Srinivasa Rao, Reducing the Variables in Boolean Function Using Fuzzy Cognitive Map to Create a Circuit, International Journal of Pure and Applied Mathematics, Volume 119 No. 9 2018, 89-100
  - https://acadpubl.eu/jsi/2018-119-9/articles/9/9.pdf

- 38. G Vijaya Lakshmi ,L Anand Babu ,K Srinivasa Rao ,Viscous dissipation effect on MHD nanofluid flow on an exponentially radiating stretching sheet in thermally stratified medium, International Journal of Pure and Applied Mathematics, Volume 118, Special Issue, No.10 2018, Pg.No:147-165. https://acadpubl.eu/jsi/2018-118-10-11/articles/10/57.pdf
- 39. G Vijaya Lakshmi ,L Anand Babu ,K Srinivasa Rao, MHD mixed convection stagnation point flow of nanofluid through a porous medium over stretching sheet, International Journal of Pure and Applied Mathematics, Volume 118, Special Issue, No.10 2018, Pg.No:369-389. https://acadpubl.eu/jsi/2018-118-10-11/articles/10/38.pdf
- 40. K.Srinivasa Rao, Some Selected Topological Indices of Nonostructures of Type King's graph and first order hierarchy honecomb, Madhya Bharti Journal of Science, 2019, vol.61(2), page:01-05 http://dhsgsu.ac.in/userfiles/1-KS%20Rao%20Curve(1).pdf
- 41. Vijayavani Pachala, Tabita Dokiparty, Srinivasa Rao Konda, Sheaf Automata of p- Near Rings, Solid State Technology, vol.63, 1s(2020), pp:351-354 http://solidstatetechnology.us/index.php/JSST/article/view/ 722
- 42. K.Srinivasa Rao, B.Amudha, Ismail Naci Cangul, Hosoya Polynomial and Wiener Index of Concatenated Octachains, Advanced Studies in Contemporary Mathematics, 30(2020), No.4,pp.609-622 https://jangjeonopen.or.kr/public/upload/1604349730-ascm30-4-14.pdf
- 43. 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
  https://jangjeonopen.or.kr/public/upload/1611954472-ascm31-1-5.pdf
- 44. K. Srinivasa Rao, B. Amudha, Symmetric Division Deg(SDD) Index, SDD and Randic Matrices, Proceedings of Jangjeon Mathematical Society, 24(2021), No.3, pp 389-402

- https://jangjeonopen.or.kr/public/upload/1627848083-pjms24-3-10-fin.pdf
- 45. K.Srinivasa Rao, K.Saravanan, K.N.Prakasha, Ismail Naci Cangul, Maximum and Minimum Degree Energies of p-Splitting and p-Shadow Graphs, TWMS Journal of Applied and Engineering Mathematics, Vol 12(1), 2022, pp.1-10
  http://jaem.isikun.edu.tr/web/images/articles/vol.12.no.1/01.pdf
- 46. K.Srinivasa Rao, Hosoya Polynomial and Wiener Index of Kings's Graph Type Nanostructure, Mukt Shabd Journal, Vol XI, Issue-1, 2022, page.No:272-282 DOI:10.0014.MSJ.2022.V11I01.0086781.112426 https://shabdbooks.com/index.php/volume-11-issue-1-2022/
- 47. K.Srinivasa Rao, N. Meenakshi, Degree Based Topological Indices of Triangulane, Naveen Anveshan- A Journal of the Multidisciplinary Subjects, Volume 04, No.1, August 2022, page no: 112-119
- 48. Anjana Sreenitya.L, K.Srinivasa Rao, Some Selected Degree-Based Topological Indices of Oxide Networks, Naveen Aneshan-Journal of the Multidisciplinary Subjects, Vol.04, No.02, pp: 03-09, December 2022
- 49. D.Vijayalakshmi.D, K.Srinivasa Rao, Path Kernel and Protein Similarity/Dissimilarity Study, Research and Reflections on Education ,ISSN 0974-648X(P) Vol.20, No. A, October 2022, pp:122- 129.
- 50. A.Dhanalakshmi, K.Srinivasa Rao, Graph Energy of *n*-Coronene, Journal of Xidian University, Vol.17, Issue-7, July 2023, page: 663-680 https://xadzkjdx.cn/index.php/volume-17-issue-7-july-23/Doi.org/10.37896/jxu17.7/054
- 51. K. Srinivasa Rao, B. Amudha, Ismail Naci Cangul, A Note on Degree-Based Energies of *m*-Splitting and *m*-Shadow Graphs, Applied Nonlinear Analysis and Soft Computing, ISSN: 2194-5357, vol. 1437, pp 385–399, July 2023 https://doi.org/10.1007/978-981-19-8054-1\_22
- 52. K. Srinivasa Rao, K.N.Prakasha, M.J.Sridevi, K.Saravanan, Ismail Naci Cangul, On Maximum Degree Laplacian Energy, Eurasian Mathematical Journal, submitted for publication

53. K.Srinivasa Rao, K.Saravanan, Ismail Naci Cangul, On Maximum Degree Estrada Index, Springer SI of AISC, submitted for publication.

# **Proceeding Publications:**

- 1. Vijayabarathi .S. , Srinivasa Rao.K, Study of Dual Ideals, Dual Prime Ideals of Pre A\*-algebra, Proceedings of the Eighteenth Ramanujan Symposium on Recent Trends in Dynamical Systems and Mathematical Modeling, University of Madras, Chennai, ISBN: 978-81-929362-0-8, September, 2013 Volume18(2014),99-106.
- Vijayalakshmi.D, Srinivasa Rao.K., Methods of Construction of a Graph for a Protein Using Secondary Structure Elements, Proceedings of the Eighteenth Ramanujan Symposium on Recent Trends in Dynamical Systems and Mathematical Modeling, University of Madras, Chennai, ISBN: 978-81-929362-0-8, September, 2013 Volume18(2014),94-98
- 3. Dhanalakshmi. A, Srinivasa Roark, Shivakumar.K, Characterization of Fullerene Using Adjacency Matrix, Proceedings of the International Conference on Mathematical Sciences, ISBN-978-93-5107-261-4, July, 2014, pg 529-533, Published by Elsevier.
- 4. Vijayabarathi. S. Srinivasa Rao. K, On the Pre A\*-Algebra  $A^X$ , Proceedings of the International Conference on Mathematical Sciences, ISBN-978-93-5107-261-4, July,2014, pages 15-18, Published by Elsevier.
- 5. M.Karthik, K.Srinivasa Rao, Graph Energy and Wiener Index for Some Chemical Structures, Proceedings of National Seminar on Recent Advances in Algebra, Volume-2, Issue-2(spl), 2016e, pp:65-69
- P.Chinnaraji, K.Srinivasa Rao, Partial Ordering on Pre A\*-Algebra, Proceedings of National Seminar on Recent Advances in Algebra, Volume-2, Issue-2(spl), pp:81-87
- 7. D.Arul, K.Srinivasa Rao, On Zagreb Indices, Proceedings of National Seminar on Recent Advances in Algebra, Volume-2, Issue-2(spl), pp:89-92

- 8. A.Kanchana, K.Srinivasa Rao, Reducing the Variables in Boolean Function Using Fuzzy Cognitive Map to Create a Circuit, Proceedings of National Conference on Recent Trends in Fuzzy Mathematics and its Applications, Organized by SRM University, November 3-4, 2017, page No.127-137
- Gnanasakthi.S, K.Srinivasa Rao, Inducing Pre A\*-Algebras, Proceedings of International Conference on Pure and Applied Mathematics, ISBN 978-93-87088-01-6, page no. 231-236
- Bhagya Lakshmi S M, Nadini R, K.Srinivasa Rao, Some Selected Topological Indices of Nanostructures Type King's Graph and Fist Order Hierarchy Honey Comb, Proceedings of Second International Conference on Pure and Applied Mathematics, ISBN 978-93-87088-30-6, page no. 171-181
- 11. B. Amudha, Mugilarasi V, K.Srinivasa Rao, A.Dhanalakshmi, Hosoya Polynomial and Wiener Index of King's Graph Type Nanostructure, Proceedings of Second International Conference on Pure and Applied Mathematics, ISBN 978-93-87088-30-6, page no. 141-153

# Research Papers Presented in the Conferences:

- 1. Presented a paper entitled "Pre A\*-Algebra as a Poset", at the I A.P. Science Congress, 2008 (Emerging Trends in Science and Technology) 14-16, November 2008, organized by the A.P Academy of Sciences and Osmania University, Hyderabad.
- 2. Presented a paper entitled "Ternary operation on Pre A\*-Algebra", at the I A.P. Science Congress,2008 (Emerging Trends in Science and Technology) 14-16, November 2008, organized by the A.P Academy of Sciences and Osmania University, Hyderabad.
- 3. Presented a paper entitled "Exploring Pre A\*-Algebra as a New Paradigm", at the International Conference on Systemics, Cybernetics and Informatics, organized by the Pentagram Research Center Pvt.Ltd, Hyderabad, 7-10 January 2009(663-668).
- 4. Presented a paper entitled "Some Categorical equivalences of Pre A\*-Algebra", at the II A.P. Science Congress,2009 (Science and Technology Its role in the changing Global Scenario) 14-16, November

- 2009, Organized by the A.P Academy of Sciences and S.V.University, Tirupati.
- 5. Presented a paper entitled "Partial Ordering on C-Algebra", at the International Conference on Mathematical and Computational Models, organized by the Department of Mathematics and Computer Applications, PSG College of Technology, Coimbatore, India, 21-23, December 2009.
- 6. Presented a paper entitled Pre A\*-Modules and if- then else- algebras over Pre A\*-Algebras, at the International Conference on Systemics, Cybernetics and Informatics, organized by the Pentagram Research Center Pvt.Ltd, Hyderabad, January 27- 30, 2010.
- 7. Presented a paper entitled "Decomposition of Pre A\*- Algebra", at the International Conference on Mathematics and Computer Science, 2010 (ICMCS-2010), organised by the PG & Research Department of Mathematics, Loyola College, Chennai, February 5-6, 2010.
- 8. Presented a paper entitled "Categorical Aspects of Pre A\*-Algebras", at the International Conference on Mathematics and Computer Science, 2010 (ICMCS-2010), organised by the PG & Research Department of Mathematics, Loyola College, Chennai, February 5-6, 2010.
- 9. Presented a paper entitled "Products and Co-Products in the Category of Pre A\*-Algebras", at the International Conference on Mathematics and Computer Science, 2010 (ICMCS-2010), organised by the PG & Research Department of Mathematics, Loyola College, Chennai, February 5-6, 2010.
- 10. Presented a paper entitled "On Pre A\*-Algebras", at the International Conference on Mathematics, Statistics & Computer Engineering, 2012 (ICMSCE-2012), organized by the International Multidisciplinary Research Foundation of Ratnaprasad Multidisciplinary Research & Educational Society, Vijayawada, September 13-14, 2012.
- 11. Presented a paper entitled "Comparative Analysis of Methods for Protein Similarity and Dissimilarity using Graphical Representation", at

- XXI Congress & National Conference on Applications of Mathematics –In Engineering ,Physics and Life Sciences, organized by the Department of Mathematics , SVU College of Sciences, Sri Venkateswara University, Tirupati, during 7-9 December 2012.
- 12. Presented a paper entitled "Methods of Construction a Graph for a protein using Secondary Structural Elements", at XVII Ramanujan Symposium of Recent Trends in Dynamical Systems and Mathematical Modelling, organized by the Ramanujam institute for Advanced study in Mathematics, University of Madras, Chennai, 25-27, September, 2013
- 13. Presented a paper entitled "Study of Dual Ideals, Dual Prime Ideals of Pre-A\* Algebra" at XVII Ramanujan Symposium of Recent Trends in Dynamical Systems and Mathematical Modelling organized by the Ramanujam institute for Advanced study in Mathematics , University of Madras, Chennai, 25-27, September, 2013
- 14. Presented a paper entitled "Proteins-Graph Theoretical Model Using Beta Turn Structure" at the Fr. Racine International Mathematics Congress, organized by the PG & Research Department of Mathematics , Loyola College , Chennai October 3 5, 2013.
- 15. Presented a paper entitled "Characterization of Fullerene Using Adjacency Matrix", at the International Conference on Mathematical Sciences, organized by the Satyabhama University, Chennai, 17-19, July, 2014.
- 16. Presented a paper entitled "On the Pre A\*-Algebra  $A^X$ ", at the International Conference on Mathematical Sciences, organized by the Satyabhama University, Chennai, 17-19, July, 2014.
- 17. Presented a paper entitled "Estimation of Molecular Descriptors of the Fullerene Using Adjacency Matrix", at the International Conference on Mathematical Sciences, organized by the International Multi-Disciplinary Research Foundation in collaboration with Madurai Kamaraj University, Madurai, 21-23, August, 2014.
- 18. Presented a paper entitled "Protein Similarity/Dissimilarity Using Contact Map", at the International Conference on Mathematical Sciences, organized by the International Multi-Disciplinary Research Foundation

- in collaboration with Madurai Kamaraj University, Madurai, 21-23, August, 2014
- 19. Presented a paper entitled "Characterization of  $\alpha$ -Cyclodextrin Using Adjacency and Distance Matrix", at the International Conference on Frontier Areas of Physics, organized by the Department of Physics, SCSVMV, Kanchipuram, 18-19, December, 2014.
- 20. Presented a paper entitled "Prediction of Hydrophobic Core Using Contact Map and Minimal Connected Dominating Set", at the International Conference on Frontier Areas of Physics, organized by Department of Physics, SCSVMV, Kanchipuram, 18-19, December, 2014.
- 21. Presented a paper entitled "Hosoya,Schultz, Modified Schultz Polynomials and their Related Indices of  $\alpha$ -Cylcodextrin", at the National Conference on Advances in Mathematical Sciences, organized by the Department of Mathematics and Statistics, K.B.N. College, Vijayawada, Andhra Pradesh, 28th November 2015
- 22. Presented a paper entitled "Equi-Component of Languages in Recursive Languages" at the International Multidisciplinary Academic Conference Thailand, organized by IMR, in collaboration with the Center for Scientific Research Education Institute for Foreign Affairs and Diplomacy at IMRF Thailand Chapter, Chonburi, Thailand, September 26-30, 2016
- 23. Presented a paper entitled "On Zagreb Indices" at National Seminar on Recent Advances in Algebra, organized by the Department of Mathematics, Sri Subbaraya & Narayana College, Narasaraopet, and Andhra Pradesh on 23rd October 2016.
- 24. Presented a paper entitled "Graph Energy and Wiener Index for Some Chemical Structures" at the National Seminar on Recent Advances in Algebra, organized by the Department of Mathematics, Sri Subbaraya & Narayana College, Narasaraopet, Andhra Pradesh on 23rd October 2016.
- 25. Presented a paper entitled "Partial Ordering on Pre A\*-Algebra" at the National Seminar on Recent Advances in Algebra, organized by

- the Department of Mathematics, Sri Subbaraya & Narayana College, Narasaraopet, Andhra Pradesh on 23rd October 2016.
- 26. Presented a paper entitled "Topological Indices of Aromatic Hydrocarbons Containing Five Benzene Rings" at the International Conference on Contemporary Approaches in Mathematics and Emerging Engineering Trends, organized by the Vinayaka Missions University, held on 4-5, May 2017
- 27. Presented a paper entitled "Heat and Mass Transfer in MHD stagnation point Nanofluid flow over a stretching sheet in a porous medium with Chemical Reaction and Prescribed surface heat flux", at the International Conference on New Frontiers of Engineering, Science, Management and Humanities, organized by the Institute of Electronics and Telecommunication Engineers, Sector 30-B, Chandigarh, 29th July 2017
- 28. Presented a paper entitled "Hosoya Polynomial and Wiener Index of Stripes of Nonotube at International Conference on Pure and Applied Mathematics", organized by the Department of Mathematics, SCSVMV, 19-20, February 2018
- 29. Presented a paper entitled "Inducing Pre A\*- Algebra", at the International Conference on Pure and Applied Mathematics, organized by the Department of Mathematics, SCSVMV, 19-20, February 2018
- 30. Presented a paper entitled "Fourier Analysis of Pre A\*- Algebra" at the International Conference on Pure and Applied Mathematics, organized by the Department of Mathematics, SCSVMV, 19-20, February 2018
- 31. Presented a paper entitled "Some Topological Indices of Nanotube  $TUC_5C_6C_8$ " at the International Conference on Pure and Applied Mathematics, organized by the Department of Mathematics, SCSVMV, 19-20, February 2018
- 32. Presented a paper entitled "Effect of Partial Slip and Radiation on MHD Nanofluid over an Exponentially Stretching Sheet Embedded in Double Stratified Medium" at the International Conference on Pure and Applied Mathematics, organized by the Department of Mathematics, SCSVMV, 19-20, February 2018

- 33. Presented a paper entitled "On Some Classes of Bi-Univalent Functions" at the International Conference on Pure and Applied Mathematics, organized by the Department of Mathematics, SCSVMV, 19-20, February 2018
- 34. Presented a paper entitled "Extension of Distinct Minimized Equation from Unique Boolean Function in Simple Truth Table as n variables" at the International Conference on Pure and Applied Mathematics, organized by the Department of Mathematics, SCSVMV, 19-20, February 2018
- 35. Presented a paper entitled "Wiener Index and Hosoya Polynomial of Octachains" at the International Conference on Pure and Applied Mathematics, organized by the Department of Mathematics, SCSVMV, 19-20, February 2018
- 36. Presented a paper entitled "Some Topological Indices of Nanotube  $TUC_5C_6C_8$ " at International Conference on Mathematics, Statistics & Computer Science, Asian Institute of Technology CC, Bangkok, Thailand, May25-26, 2018
- 37. Presented paper titled "Role of Wiener Index in Chemical Graph Theory", at the Annual Conference on History and Development of Mathematics, organized by the Samskrita Academy, Madras, 27-29, November 2018
- 38. Presented a paper entitled "Secondary Structure Elements of Protein and Path Kerna", at the 2nd International Conference on Pure and Applied Mathematics, organized by the Department of Mathematics, SCSVMV, 17-19, December 2018
- 39. Presented a paper entitled "Hosoya Polynomial and Wiener Index of  $n \times n$  King's Graph", at the 2nd International Conference on Pure and Applied Mathematics, organized by the Department of Mathematics, SCSVMV, 17-19, December 2018
- 40. Presented a paper entitled "Some Selected Degree Based Topological Indices of King's Graph" at the 2nd International Conference on Pure and Applied Mathematics, organized by the Department of Mathematics, SCSVMV, 17-19, December 2018

- 41. Presented a paper evtitled "Maximum Degree Laplacian Energy of a Graph", at the International Conference on Mathematical Engineering Applications for Sustainable Development, University Malaya, Kuala Lumpur, Malaysia, August 16-18,2019
- 42. Presented a paper entitled "Distributive Lattice Ordered Recursive Languages and their Complemented Languages", at the International Conference on Mathematical Advances and Applications 2020, organized by the Research Educational Talks Daily International, on November 23-21 2020.
- 43. Presented a paper entitled "Calculation of Maximum Degree Energy Using Integrals" at the National E-Conference on Recent Trends in Mathematics-2021, organised by the Department of Mathematics, BIST, BIHER, Thiruvanchery, Chennai, on 22nd January 2021.
- 44. Presented a paper entitled "The sub-near-rings of a Homomorphic Group Semi Turing Machine form a Near Ring Structure", at the International Conference on Advances in Mathematics and Computer Science-2021. organized by the IMRF Institute of Higher Education and Research, Vijayawada, A.P,during 16-17 April,2021
- 45. Presented a paper entitled "Maximum Degree Energy of Shadow graphs", at the International Conference on Mathematics, Statistics & Computer Science, organized by IMRF Institute of Higher Education and Research, Vijayawada, A.P during 09-10 July 2021.
- 46. Presented a paper entitled "On Maximum Degree Laplacian Energy", at the 5th International Conference on Current Scenario in Pure and Applied Mathematics, organized by the PG and Research Department of Mathematics, Kongunadu Arts and Science College, Coimbatore, Tamilnadu, January 27-28 2022.
- 47. Presented a paper entitled "Maximum Degree Estrada Index", at International Virtual Conference on Research Innovation in Science, Engineering and Technology, organized by the department of Mathematics, Kings Engineering College, Sriperumbudur, Chennai, March 1-2, 2022
- 48. Presented a paper entitled "On Common Neighborhood Energy of a Graph" at the International Conference on Recent Strategies in Mathematics and Statistics ICRSMS 2022, organized by the Department of

- Mathematics, Stella Maris College, Chennai, in collaboration with the Department of Mathematics, IIT Madras, during 19-21, May 2022.
- 49. Presented a paper entitled "Degree Based Topological Indices of Triangulane", at the 33rd All India Congress of Zoology(AICZ) and National Seminar on Emerging Trends in Biological Sciences in the Light Environmental Degradation and Life Sustainability, organized by the Department of Zoology, Pandit S.N. Shukla University, Shahadol, M.P in collaboration with the Zoological Society of India, August 10-12, 2022.
- 50. Presented a paper entitled "Some Selected Degree-Based Topological Indices of Oxide Network" 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
- 51. 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 Vivekananda Govt. P.G.College, Neemuch (M.P), India, 10-11, February 2023
- 52. Presented a paper entitled "Degree Based Topological Indices of Triangulane" at the International Conference on Discrete Mathematics & Graph Theory, organized by the Department of Mathematics, Vidyavardhaka College of Engineering, Mysuru, Karnataka, 8-10, June 2023

#### Invited Lectures, Resource Person and Academic Positions:

- 1. Acted as a Co-ordinator for National workshop on Writing Scientific Proposals and Papers for Quality Research, organized by the Department of Science & Humanities, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram, on 14th February, 2013.
- 2. Acted as a Resource person in One Day Workshop on MATLAB and Its Applications organized by the Department of Mathematics, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram on 30-08-2013.

- 3. Acted as a Resource person in Workshop on MATLAB and Its Applications organized by the Department of Mathematics, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram on 06-09-2013.
- 4. Acted as a Convener cum Resource person for One Day Workshop on MATLAB and Its Applications organized by the Department of Mathematics, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram on 20-09-2013.
- 5. Acted as a Convener cum Resource person for One Day Workshop on MATLAB and Its Applications, organized by the Department of Mathematics, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram on 26-09-2013.
- 6. Delivered invited talk on Mathematical Modeling on Differential Equations in the TEQIP-II sponsored one week short term program on Significant Role of Mathematical Analysis in Applied Sciences and Engineering, organized by the Applied Mathematics & Humanities Department, Sadder Vallbhbhai National Institute (NIT-Surat), Surat from 30-9-2013 to 04-10-2013.
- 7. Acted as a Resource person in Workshop on MATLAB and Its Applications organized by the Department of Mathematics, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram on 10-10-2013.
- 8. Acted as a Resource person in Workshop on MATLAB and its Applications (Level-II) organized by the Department of Mathematics, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram on 03-01-2014.
- Acted as a Co-ordinator for National workshop on LaTeX for Researchers, organized by the Department of Mathematics, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram on 15-16, February, 2014.
- 10. Acted as a Resource person in Workshop on MATLAB and its Applications (Level-II) organized by the Department of Mathematics, Sri

- Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram on 08-03-2014.
- 11. Delivered a lecture on Operations Research in Virtual Online Class Room, organized by CII (Confederation of Indian Industry), Institute of logistics,, Chennai, May 2014.
- 12. Acted as a Resource Person in the National Workshop on Basics of MATLAB held on 10-10-2014, organized by the Department of Physics, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram
- 13. Acted as a Resource Person cum Organizing Secretary for the National Workshop on MATLAB Programming, organized by the Department of Mathematics, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram on 28th November, 2014.
- 14. Acted as a Resource Person in the National Workshop on Basics of MATLAB held on 19th September 2015, organized by the Department of Physics, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram.
- 15. Acted as a Resource Person in the Workshop on MATLAB and its applications held on 12th October 2015, Organised by the Department of Mathematics, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram.
- 16. Acted as a Resource Person in the Workshop on MATLAB and its Applications held on 16th October, 2015, organised by the PG & Research Department of Mathematics, Government Arts College, Chidambaram, Tamilnadu.
- 17. Acted as a Resource Person for the One Week Short Term Course on Math with MATLAB, organized by the Department of Mathematics and Statistics, KBN College, Vijayawada, from 16-11-2015 to 20-11-2015.
- 18. Acted as a Chairperson at National Conference on Advances in Mathematical Sciences, organized by the Department of Mathematics & Statistics, K.B.N College, Vijayawada, Andhra Pradesh on 28th November 2015.

- 19. Acted as a Resource Person in the Workshop on Math with MATLAB for Researchers held on 7th February 2016, organised by the Department of Mathematics, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram.
- 20. Delivered a Special lecture at the One Day Workshop on MATLAB held on 04.03.2016 at the Department of Mathematics, Annamalai University, Annamalainagar, Chidambaram.
- 21. Acted as a Chief Guest in the National Mathematics Day, organized by Sanford Higher Seconday School and Sanford School's Ramanujan Mathematical Association held on 9th January 2016
- 22. Delivered lecture in Quality Enrichment Programme-I (QEP-I) organized under the auspices of Sankara Ganitha Sastra Parishad, Department of Mathematics, SCSVMV University on 24th March 2016.
- 23. Acted as a Chairperson for a technical session in the International Conference on Science, Technology, Women Studies, Business & Social Sciences 2016 at IMRF Goa Chapter, Margoa, Goa, India, November 03-05, 2016.
- 24. Acted as a Resource Person in the Workshop on MATLAB for Researchers held on 12-02-2017, organized by the Department of Mathematics, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram .
- 25. Acted as a Chairperson at International Conference on Discrete and Computational Mathematics, organized by department of Mathematics, The Gandhigram Rural Institute-Deemed University, Gandhigram, Dindigul District, Tamil Nadu, India during February 16-18, 2017.
- 26. Acted as a Resource Person in the National Workshop on MATLAB in Applied Sciences, held on 15th -16th September 2017, organized by the Department of Mathematics, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram.
- 27. Delivered an Invited talk on the topic, Boolean Algebras of Pre A\*-Algebra at the International Conference on Advances in Mathematics and Computer Science-2017, organized by the V.V. Vanniaperumal

- College for Women, Virudhunagar, Tamilnadu, during December 14-16, 2017.
- 28. Delivered a talk on Applications of Mathematics at the Department of Mathematics, S.S.K.V. College of Arts and Science for Women, Kizhambi, Kanchipuram, Tamilnadu on 8th January 2018.
- 29. Delivered a talk in the Winter Refresher Course in Mathematics on the topic of Linear Algebra at SCSVMV, Kanchipuram, February 0-3,2018
- 30. Delivered an Invited talk on the topic Hosoya Polynomial and Wiener Index of Concatenated Octachains at the International Conference on Advances in Mathematics, Computers and Physical Sciences-2018, organized by IMRF Chandigarh Academic Chapter, Chandigarh during February 22-24, 2018.
- 31. Acted as a Chairperson in the International Conference on Advances in Mathematics, Computers and Physical Sciences-2018, organized by IMRF Chandigarh Academic Chapter, Chandigarh during February 22-24, 2018.
- 32. Delivered an Invited talk on MATLAB at the Department of Mathematics, Sri Venkateswara University, Tirupati on 14th March 2018.
- 33. Delivered Guest Lecture on Complex Analysis at the Department of Mathematics, Adhi College of Engineering and Technology, Sankarapuram, Puliambakkam Post, Tamilnadu on 20th April 2018.
- 34. Delivered a lecture titled MATLAB and its application at the Department of Mathematics, Kasetsart University, Bangkok, Thailand on 23rd May 2018.
- 35. Acted as a Chairperson in the International Conference on Mathematics, Statistics and Computer Science, at Asian Institute of Technology CC, Bangkok, Thailand, May 25-26, 2018
- 36. Delivered an Invited talk on Wiener-Type Topological Indices at the International Conference on Advances in Pure and Applied Mathematics, organized by School of Mathematics, Madurai Kamaraj University, Madurai, Tamilnadu during September 6-8, 2018.

- 37. Acted as a Chairperson person in the Annual Conference on History and Development of Mathematics, Organized by The Samskrita Academy, Madras from 27th to 29th November 2018.
- 38. Acted as a Chairperson at Second International Conference on Pure and Applied Mathematics, organized by the Department of Mathematics, SCSVMV during 17-19, December 2018.
- 39. Acted as a Resource Person in the Workshop on MATLAB in Applied Sciences, organized by the department of Mathematics, Godavari Institute of Engineering & Technology(GIET), Rajahmundry, 12-03-2019
- 40. Delivered an Invited Talk at the National Conference on Recent Advances in Mathematics, held on March 19-20, 2019, at the Department of Mathematics, Sri Venkateswara University, Tirupati, A.P on the topic Maximum Degree Laplacian Energy of a Graph.
- 41. Delivered a Talk on Data Analysis using MATLAB in Faculty Development Programme on Data Analysis Using R and MATLAB Tools on 03-05-2019, organized by the Department of Information Technology, C. Abdul Hakeem College of Engineering & Technology, Melvisharam, Vellore, TN.
- 42. Acted as a Resource Person and delivered invited lecture on MATLAB And Its Programming in Mathematics Association Meeting held on 09-08-2019 and 10-08-2019, at the department of Mathematics, PC PT MGR Govt. Arts & Science College, Puthur, Sirkali, Tamilnadu.
- 43. Delivered an Invited Talk at the International Conference on Mathematical Engineering Applications for Sustainable Development -2019 at the University of Malaya, Kuala Lumpur, Malaysia, on August 16-18, 2019.
- 44. Acted as a Chairperson in the International Conference on Mathematical Engineering Applications for Sustainable Development -2019 at the University of Malaya, Kuala Lumpur, Malaysia, on August 16-18, 2019.
- 45. Acted as a Resource Person in National Workshop on Numerical Computations Using MATLAB, organized by the Department of Mathematics, Little Flower Degree & PG College, Uppal, Hyderabad, during 6-7 September, 2019.

- 46. Delivered Lecture on 13-09-2019 as Resource Person in the Refresher Course in Mathematics organized at UGC-Human Resource Development Centre (HRDC), Sri Venkateswara University, Tirupati during the period from 09-09-2019 to 21-09-2019.
- 47. Delivered Lecture on 17-09-2019 as Resource Person in the Refresher Course in Mathematics organized at UGC-Human Resource Development Centre (HRDC), Sri Venkateswara University, Tirupati during the period from 09-09-2019 to 21-09-2019.
- 48. Acted as a Resource Person in the National Workshop on MATLAB in Applied Sciences, organized by the Department of Mathematics & Department of Computer Science, MVN JS & RVR College of Arts & Science, Malikipuram, East Godavari District, A.P on 19th September 2019.
- 49. Delivered an Invited Talk in the National Seminar on Recent Trends in Mathematics, Organized by the department of Mathematics (U.G & P.G), Sri Y.N.College, Narasapur, West Godavari District, A.P on 21st September 2019.
- 50. Delivered an Endowment Lecture at XXVIII Congress of Andhra Pradesh and Telangana States Mathematical Sciences & National Conference on Recent Trends in Pure and Applied Mathematics, organized by the Department of Mathematics, Rashtriya Sanskrit Vidyapeetha, Tirupati during 6-8 December 2019.
- 51. Acted as a Resource Person in National Workshop on MATLAB in Applied Sciences, organized by the Department of Mathematics, Government Arts and Science College, Hosur, Tamilnadu, during 17-18 December 2019.
- 52. Acted as a Resource Person in A Two Day National Workshop on MAT-LAB, Megastat, & Solver, organized by the Department of Mathematics and Statistics, Avanthi Degree & P.G College, Hyderabad, during 27-28 December 2019.
- 53. 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.

- 54. 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.
- 55. 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.
- 56. Delivered an Invited talk in the 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.
- 57. Delivered an Invited talk in the National Webinar on MATLAB and Its Applications, Organized by the Department of Mathematics, Aurora's Degree and PG College, Hyderabad, on 5th July 2020.
- 58. Delivered a talk on Getting Started with MATLAB in Aacharaya's International Webinar Series, organized by Aacharya.net (The Hub of Qualified Teachers), on 26th July 2020.
- 59. Delivered a talk in One-Week International Online International Faculty Development Program on Mathematical Prototypes and their Applications in Engineering and Science, organized by S.R.K.R. Engineering College, Bhimavaram, Andhra Pradesh, from 26th July to1st August,2020.
- 60. Delivered a talk in the International Conference on Mathematical Advances & Applications 2020 on the topic Maximum Degree Estra Index, organized by REd Talks Daily International, Vijayawada, Andhra Pradesh, India, during August 07-08,2020
- 61. Acted as a Chairperson in the International Conference on Mathematical Advances & Applications 2020, organized by REd Talks Daily International, Vijayawada, Andhra Pradesh, India, during August 07-08,2020
- 62. Acted as a resource person for Online One Week Short Term Course on MATLAB Applications for Applied Science and Engineering Problems held from 12-10-2020 to 19-10-2020 and delivered lecture session

- on Getting started with MATLAB, Pre-defined functions and Matrix Algebra using MATLAB on 12-10-2020 (2:00 to 5:15 pm) and 13-140-2020 (2:00 to 5:15 pm)at UGC-Human Resource Development Centre, JNT University, Hyderabad.
- 63. Acted as a resource person for Online One Week Short Term Course on MATLAB Applications for Applied Science and Engineering Problems held from 12-10-2020 to 19-10-2020 and delivered lecture session on Boundary value problems and its solutions through MATLAB & MATLAB Programming on 15-10-2020 (10:00 am to 5:15 pm) at UGC-Human Resource Development Centre, JNT University, Hyderabad.
- 64. Delivered a talk in the Institute of Mathematics and Management Online Conference on Mathematical & Biological Sciences 2020 on the topic MATLAB and Applications, held in Melbourne, Australia on 29th and 30th October 2020, organized by the Institute of Mathematics and Management, Sri Lanka.
- 65. Acted as a resource person on 23-11-2020 to deliver two expert lectures in the refresher course:Online Course Development and use of ICT in Teaching & Research (ID) held from 18-11-2020 to 04-11-2020 on Basics of LaTeX, organized by UGC-Human Resource Development Centre, B.P.S. Women University, Khanpur Kalan (Sonepat), Haryana
- 66. Delivered a talk on Getting Started With MATLAB on 11-04-2021, organized by Mathematics and Abstractions, Pakistan
- 67. 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 (Sonepat), Haryana
- 68. Acted as a resource person in 5 days Online National Level Short Term Training Program on Matrix Method of Structural Analysis By Using MATLAB held from 30-07-2021 to 03-08-2021 organized by the department of Civil and Structural Engineering, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram.

- 69. Acted as a Chairperson in the 3rd International Conference on Mathematical Physical and Computational Sciences-2021, held on 27th & 28th August 2021, organized by Andhra Pradesh and Telangana Society for Mathematical Sciences(APTMS)
- 70. Delivered an invited talk at the International Conference on Recent Advances in Basic and Applied Sciences, held on 27th & 28th August 2021, organized by the Faculty of Sciences, Baba Mastnath University, Rohtak, Haryana.
- 71. Acted as a Chairperson in the International Conference on Recent Advances in Basic and Applied Sciences, held on 27th & 28th August 2021, organized by the Faculty of Sciences, Baba Mastnath University, Rohtak, Haryana.
- 72. Acted as a Resource person in Value Added Course in MATLAB, organized by the Department of Mathematics, Sir C.R. Reddy College, Eluru, during 13-15, September 2021.
- 73. Acted as a resource person in National Webinar on Basics of MATLAB organized by the department of Mathematics, V.K.V Government Degree College, Kothapeta, East Godavari District, Andhrapradesh on 10-12-2021.
- 74. Delivered one expert lecture on Basics of MATLAB in Online One week Hands-on Workshop on Programming Skills Using Python, organized by the department of Electronics and Communication Engineering, B.P.S. Mahila Vishwavidyalaya, Khanpur Kalan, Haryana, from 21st February to 28th February 2022.
- 75. Acted as a resource person in National Webinar on Basics of MATLAB, organized by the Department of Mathematics, S.V.K.P & Dr.K.S.Raju Arts & Science College(A), Penugonda, West Godavari District, Andhra Pradesh, on 14-05-2022
- 76. Acted as a Resource Person in Certificate Course on MATLAB, organized by the Department of Mathematics, Little Flower Degree & PG College, Uppal, Hyderabad, during 4-6 August 2022.
- 77. Acted as a Resource Person in Faculty Development Program on Mathematical & Computational Fluid Dynamics Using MATLAB, organized

by the department of Mathematics, Aurora's Degree & PG College, Hyderabad, Telengana, in collaboration with Andhra Pradesh & Telengana Society for Mathematical Sciences on 9th & 10th November 2022.

- 78. Acted as one of the Resource Persons in a Five-Day National Level Online Faculty Development Programme on Effective Pedagogy for Science, (26th November to 3rd December 2022) jointly organized by the Department of Physics and Mathematics, J.M.J College for Women(A), Tenali, Andhra Pradesh on 3rd December 2022
- 79. Acted as a resource person in National Workshop on Introduction to MATLAB organized by the department of Mathematics, Government Degree College, Avanigadda, Krishna District, Andhra Pradesh on 13-12-2022.
- 80. 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.
- 81. 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
- 82. 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 Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram.
- 83. 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
- 84. Delivered a guest lecture on Biostatistics to the Research Scholars at the Department of Zoology, Pandit S.N.Shukla University, Shahdol, M.P on 17-08-2023

- 85. Acted as a resource person in the National Webinar on MATLAB and Its Applications, organized by the Department of Mathematics, Sir C R R College, Eluru, Andhra Pradesh on 04-09-2023
- 86. Acted as a resource person in the Workshop on Applications of MAT-LAB, organized by the Department of Mathematics and Statistics, CH.S.D.ST. Theresa's College for Women (A), Eluru, Andhra Pradesh, during 9-10, October, 2023
- 87. Acted as a resource person in Hands-on Training: Applications of MATLAB, organized by the department of Mathematics, St.Ann's College for Women (A), Mehdipatnam, Hyderabad, held on 16-12-2023
- 88. Delivered two lectures on 20-12-2023 as part of the Two Weeks Online Refresher Course on Development of ICT Skills for Implementation of NEP-2020, organized by the UGC-Human Resource Development Centre of B.P.S Mahila Vishwavidyalaya, Khanpur Kalan, Haryana, held from 16-29 December 2023.
- 89. Acted as a resource person in Brain Storming Workshop on Applications of MATLAB, organized by the Department of Mathematics, VELS Deemed to be University, Chennai, Tamilnadu on 28-12-2023.

# Seminars, Workshops and QIPs Attended:

- 1. Attended the AICTE- ISTE, New Delhi sponsored One week Short Term Training Programme on "Numerical Methods in Fluid and Heat Transfer" Conducted at University College of Engineering, Sambalpur University, Burla during the period 24th to 28th Dec 2001
- 2. Attended short term course on Computer Oriented Numerical Analysis under the Quality Improvement Programme(QIP) of AICTE, New Delhi held at Indian Institute of Sciences, Bangalore during the period September 16th to 20th 2002.
- 3. Attended the QIP short term course on Mathematical Techniques in Science and Engineering organized by the department of Mathematics, at Indian Institute of Technology, Guwahati during the period June 26th to 30th 2006

- 4. Attended Faculty Enablement Programme conducted by IEG-JKC & Globarene Technologies Pvt Ltd , Hyderabad during the period November 19th to 24th 2007.
- 5. Participated in the National Mathematics Day celebrations and attended a Lecture on Applications of Mathematics to Computer Vision and Machine Learning organized by the Department of Science and Humanities, SCSVMV University, on 28th January, 2013.
- 6. Attended a National workshop on Writing Scientific Proposals and Papers for Quality Research, organized by the Department of Science & Humanities, SCSVMV University, on 14th February, 2013.
- 7. Attended National Workshop on MATLAB and Its Application in Digital Image & Signal Processing held at Indian Institute of Information Technology(IIIT), Allahabad during the period 7-8th March, 2013.
- 8. Attended National Workshop on Mathematical Modeling Using MAT-LAB (MMM-2013) held at B.S.Abdur Rahman University, Chennai during the period April 25-26,2013.
- Attended Two Day Workshop on Latex for Researchers organized by the Digital Media Computing Division, School of Computing Science and Engineering, VIT University, Vellore on 26th and 27th July 2013.
- 10. Attended Two Day Workshop on Soft computing Techniques using Matlab organized by TBI@KEC in association with Department of CSE, Kongu Engineering College from 13-09-2013 to 14-09-2013.
- 11. Attended One Week Short Term Training Program on Signigicant Role of Mathematical Analysis in Applied Sciences and Engineering, organized by Applied Mathematics & Humanities Department, Sardar Vallbhbhai National Institute of Technology(NIT), Surat from 30-09-2013 to 04-10-2013
- 12. Attended Two Day National Level Workshop on "MATLAB Based Advanced Optimization Techniques (Under TEQIP-II)" during 7-8 November ,2013 conducted by Department of Mechanical Engineering, Sri Vidya nikethan Engineering College, Tirupati, Andhra Pradesh.

- 13. Attended One Week Workshop on Mathematical Modeling in Engineering (MME-2013) organized by Department of Mathematics, NIT-Warangal, sponsored by TEQIP phase-II during 2nd-6th December 2013.
- 14. Attended the Workshop on Differential Equations and Its Applications, Organized by Department of Mathematics, IIST, Trivedrum, Kerala, during 18-21 December, 2013.
- 15. Attended the National Workshop on MATLAB and its Applications in Computational Intelligence, Organized by Department of Computer Science & Engineering, Faculty of Engineering & Technology, SRM University, Chennai, during 7th -8th January, 2014.
- 16. Attended the National Workshop on Introduction to SPSS, Organized by Department of Education, SCSVMV University, Kanchipuram on 25th January, 2014.
- 17. Attended the National Workshop on Latex for Researchers, Organised by Department of Mathematics, SCSVMV University, Kanchipuram, during 15-16, Februay, 2014.
- 18. Attended the two-day workshop on Research Practices on Topics in Mathematics and Computer Science, Organized by the Department of Mathematics, Madras Christian College, Chennai, during August 7-8, 2014
- 19. Attended the Short Course on Computational Methods in Engineering using Matlab held at IIT Gandhinagar during December 17-19, 2014
- 20. Attended the ene day user awareness programme on Shodhganga and Anti-Plagiarism Software (iThenticate/Trunitin) Organised by SCSVMV University library, Kanchipuram, in association with Information and Library and Library network centre (Inflibnet)/UGC, Gandhinagar on 26th, March 2015.
- Participated in the National Conference on Fuzzy Theory and Applications-NCFTA15, organized by the department of Mathematics, KCG College of Technology, Karapakkam, Chennai during 24-25 July,2015

- 22. Attended the National Workshop on Math with Open Source Software, organized by Department of Mathematics, SCSVMV University 3rd & 4th September, 2015.
- 23. Attended Hands-on Training Program on Soft Computing using MAT-LAB at Department of Computer Technology, MIT Campus, Anna University held during 9-11, October, 2015.
- 24. Participated in the Workshop on MATLAB and its Applications, organised by PG & Research Department of Mathematics, Government Arts College, Chidambaram, Tamilnadu, held on 16th October, 2015,
- 25. Attended the One Week Short Term Course on Math with MATLAB, organized by the Department of Mathematics and Statistics, KBN College, Vijayawada, from 16-11-2015 to 20-11-2015.
- 26. Attended the Workshop on Math with MATLAB for Researchers held on 7th February, 2016, Organized by the Department of Mathematics, SCSVMV University, Kanchipuram
- 27. Attended the workshop on timely completion of Data Uploading for AISHE 2014-2015 and AISHE 2015-2016 State Nodal Officer Training Cum Sensitisation workshop held at the Director of Technical Education, Chennai on 19-01-2016.
- 28. Attended Seminar on Cloud Computing and Big Data Analysis held on 29th January, 2016, organized under the auspices of Sankara Ganitha Sastra Parishad, of the Department of Mathematics, SCSVMV University.
- 29. Participated in the Seminar on Simulation of Computing Protocols held on 25th February, 2016, organized under the auspices of Sankara Ganitha Sastra Parishad, of the Department of Mathematics, SCSVMV University.
- 30. Participated in the Quality Enrichment Programme-I (QEP2016), organized under the auspices of Sankara Ganitha Sastra Parishad, of the Department of Mathematics, SCSVMV University on 24th March, 2016.

- 31. Participated in the International Seminar on Power Sums and Univariate Distributions, organized by the Department of Mathematics, SCSVMV University on 02-09-2016
- 32. Participated in the National Seminar on Recent Advances in Physics-2016, organized by the Department of Physics, SCSVMV University on 09-09-2016.
- 33. Participated in the Quality Enrichment Programme-II (QEP2016), organized under the auspices of Sankara Ganitha Sastra Parishad of the Department of Mathematics, SCSVMV University on 20-09-2016.
- 34. Participated in the National Seminar on Recent Advances in Algebra, organized by Department of Mathematics, Sri Subbaraya & Narayana College, Narasaraopet, Andhra Pradesh on 23rd October 2016.
- 35. Participated in the One –Day workshop on Writing of Proposals for Funded Projects, organized by the Centre for Development of Teaching and Learning, SCSVMV University held on 29-07-2016.
- 36. Participated in the Workshop on MATLAB for Researchers, organized by the Department of Mathematics, SCSVMV, on 12-02-2017
- 37. Participated in the International Conference on Discrete & Computational Mathematics, organized by the Department of Mathematics, Gandhigram Rural Institute- Deemed University, Gandhigram, Dindigul, Tamilnadu, during February 16-18, 2017
- 38. Attended the National Seminar on Emerging Trends in Pure and Applied Mathematics, organized by the Department of Mathematics, SCSVMV on 24-02-2017
- 39. Attended the International Seminar on Fluid Mechanics, organized by the Department of Mathematics, SCSVMV, under the auspices of Sankara Ganitha Parishad, on 06-03-2017
- 40. Participated in the National Workshop on MATLB in Applied Sciences, held on 15th -16th September, 2017, organized by the Department of Mathematics, SCSVMV University, Kanchipuram.

- 41. Participated in the Quality Enrichment Programme-III (QEP2017), organized under the auspices of Sankara Ganitha Sastra Parishad, of the Department of Mathematics, SCSVMV University on 27th October, 2017.
- 42. Participated in Pedagogical Knowledge in Mathematics- The Teaching of Liner Algebra, organized by the Department of Mathematics, Central University of Tamilnadu, Thiruvarur during 18-22 December, 2017
- 43. Participated in the International Conference on Pure and Applied Mathematics, organized by the Department of Mathematics, SCSVMV, during 19-20 February 2018
- 44. Attended the talk on The Power of Mathematics, organized under the auspices of Sankara Ganitha Sastra Parishad, Department of Mathematics, SCSVMV in connection with the World Mathematics Day Celebrations, 23-03-2018
- 45. Participated in the One Day Workshop on Investment Avenues and their Tax Benefits, organized by Faculty of Management Studies, Commerce and Human Resources in association with the Southern Indian Regional Council of the Institute of Company Scretaries of India under the sponsorship of Investor Education & Protection Fund authority, Ministry of Corporate Affairs on 27-03-2018
- 46. Participated in the Awareness Program on Research Grant Through Funding Agencies held on 22nd August, 2018, organized by the Department of Civil and Structural Engineering, SCSVMV, Kanchipuram
- 47. Participated in the International Conference on Advances in Pure and Applied Mathematics, organized by the School of Mathematics, Madurai Kamaraj Univeristy, Madurai, Tamilnadu, during September 06-08,2018
- 48. Participated in AICTE recognized Short Term Course on Tools for Scientific Research in Engineering and Science through ICT conducted by Electrical Engineering Department from 12-11-2018 to 16-11-2018 at Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram

- 49. Attended RUSA sponsored One Day National Seminar on Recent Trends in Mathematics, organized by the Department of Mathematics (UG & PG) & IQAC, Sri Y.N. College(A), Narsapur, W.G.Dt, held on 21-09-2019.
- 50. Participated in the Faculty Development Program on Computational Tools: Megastat and Solver (MS-Excel Add-inns), organized by the Department of Mathematics, SCSVMV, during December 19-20, 2019
- 51. Participated in Institute of Mathematics and Management Conference on Mathematical and Biological Sciences, organized by Institute of Mathematics and Management, Srilanka, held at Melbourne, Australia on 29th and 30th October 2020.
- 52. Participated in the International Conference on Mathematical Advances and Applications 2020, organized by REd Talks Daily International, November 23-24,2020
- 53. Participated in International Conference on Advances in Mathematics and Computer Science-2021, organized by IMRF Institute of Higher Education and Research, Vijayawada, A.P., during 16-17, April, 2021
- 54. Participated in the National Level Webinar on Mathematical Software Workshop, organized by the Department of Applied Sciences and Humanities in Association with Mathematics Club, Universal Engineering College, Thrissur, Kerala, during 2-6, June 2021
- 55. Participated in One Week STTP through ICT Mode on Numerical and Statistical Methods with SCILAB organised by the Natinal Institute of Technical Teachers Training and Research (NITTTR), Kolkata, from 21-25 June, 2021
- 56. Participated in the Seven Day National Lelvel Online FDP on Computational Tools for Applied Mathematics and Engineers organized by the department of Mathematics, School of Foundational Sciences, Kumaraguru College of Technology Coimbatore, held from 15-21 July 2021.
- 57. Participated in the International Workshop on Numerical and Analytical Techniques in Engineering Problems, organized by the Department

- of Mathematics, SRM Institute of Science and Technology, Kattankulathur, Tamilnadu, during January, 19-21,2022.
- 58. Participated in the International Symposium on Mathematical Sciences and their Applications: MSATA-2022, organized by the Department of Applied Mathematics, Yogi Vemana University, kadapa held from 28-29, January, 2022
- 59. Participated in the Webinar Series-I on Frontiers in Mathematics, organized by the Department of Mathematics, School of Sciences, SR University, Warangal, Telangana, on 12th February, 2022
- 60. Attended the National Workshop on PPTs, Video Making & Video Editing through OBS and Opendshot Software Tools on 22-10-2022, Organized by the Department of Mathematics, V.K.V. Government Degree College, Kottapeta, Andhra Pradesh.
- 61. Participated in Five Day National Level Online FDP on Effective Pedagogy for Science, organized by the Department of Physics and Mathematics, JMJ College for Women, Tenali from 29-11-2022 to 03-12-2022.
- 62. Attended the International Conference on Relevancy of Ancient Mathematics to the current trends, organized by the National Sanskrit University, Tirupati, in collaboration with XXXI Annual Congress of APTSMS, 09-11 December, 2022

# Recognitions:

- Got IMRF Distinguished Inspiring Best Teacher Award -2020 from the International Multidisciplinary Research Foundation, Vizayawada, A.P., Indian on Sept 5th, 2020
- Got Best Teacher award for the academic year 2016-17 from SCSVMV
- Got Best Scientist Award from International Multi research Foundation, on the eve of IMRF's 66th International gathering, International Conference on Advances in Mathematics, Computers & Physical Sciences at IMRF Chandigarh Chapter, Chadigarh on 22nd February, 2018
- Received Best Paper Award in International Conference on Mathematics, Statistics and Computer Science, at Asian Institute of Technology CC, Bangkok, Thailand, May 25-26,2018

- Received Best Paper Award in International Conference on Contemporary Approaches in Mathematics and Emerging Engineering Trends, organized by Vinayaka Missions University, held on 4-5, May 2017
- Received Best Paper Award in International Conference on Data Analytics and Mathematical Modeling, organized by Vinayaka Missions University, held on 5-6, May 2016
- Received Best Paper presentation Award in 5th International Conference on Current Scenario in Pure and Applied Mathematics, Organized by PG and Research Department of Mathematics, Kongunadu Arts and Science College, Coimbatore, Tamilnadu, January, 27-28,2022
- Received Best Paper Presentation award in the International Conference on Mathematical Engineering Applications for Sustaninable Development-2019 for the paper titled "Maximum Degree Laplacian Energy of a Graph" at University of Malaya, Kuala Lumpur, Malaysia, August 16-18,2019

#### Books Published:

- 1. Introduction to MATLAB, IMRF International Publications, 2017 ISBN:978-93-86435-08-8
- 2. Chief Editor, Proceedings of the International Conference on Pure and Applied Mathematics, 2018, ISBN:978-93-87088-01-6, Published by the Department of Mathematics, SCSVMV, Kanchipuram.
- 3. Chief Editor, Proceedings of the Second International Conference on Pure and Applied Mathematics, 2018, ISBN: 978-93-87088-30-6, Published by the Department of Mathematics, SCSVMV, Kanchipuram.
- 4. Numerical Methods with Programs in MATLAB, SCSVMV Press, 2018 ISBN:978-93-87088-17-7

#### Research Guidance:

- Seven scholars completed their Ph.D under my guidance
- Three research scholars are doing their Ph.D under my guidance
- 22 Students completed their M.Phil degree under my guidance.

## Research Scholars obtained their Ph.D. Degrees under my guidance

- 1. Dr. S. Vijayabarathi(2016), Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram
- 2. Dr. A. Dhanalakshmi(2017), Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram
- 3. Dr. R. Mageswari(2018), Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram
- 4. Dr. D. Vijayalakshmi(2018), Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram
- 5. Dr. A. Kanchana (2019), Rajalakshmi Institute of Technology, Chennai.
- 6. Dr. G. Vijaya Lakshmi(2019), C.V.R. College of Engineering, Hyderabad
- 7. Dr. D. Tabhita (2022), Andhra Loyola College, Vijayawada

# Funded Project-Ongoing

Title of the Project: Yukti Prasana Kendram

- Integrating Mathematical and Computer Logic with Nyaya Shastra
- Integrating Nyaya Shastra with Computer Science

Funding Agency: IKS, Ministry of Education, India

Amount Sactioned: Rs. 18 Lakhs

Principal Investigator: Dr. K. Srinivasa Rao

## **External Thesis Evaluation:**

- 1. S. Supriya, Madurai Kamaraj University
- 2. T. Sarala, Sri Padmavati Mahila Visvavidyalayam
- 3. G. S. Shanmuga Priya, Sri Padmavati Mahila Visvavidyalayam
- 4. Veena Chandanam, Sri Padmavati Mahila Visvavidyalayam

5. Yedlapalli Jagannadha Puri, Acharya Nagarjuna University

## Overseas Exposure / Visits:

- 1. Thailand (2018)
- 2. Malaysia (2019)

#### **Academic Positions:**

- 1. Editorial Board Member and Reviewer of Journal of New Frantiers in Mathematics and Statistis, published by Institute of Mathematics and Management, Srilanka
- 2. Editorial Board Member of SCIREA Journal of Mathematics
- 3. Editorial board member of Mathema Sciences Today, an e-magazine of Andhra Pradesh and Telangana Society for Mathematical Sciences (APTSMS) for the period of January 2021-December 2022
- 4. Member, Board of Studies, Sourashtra College (Autonomous), Madurai, Tamilnadu

## **Programs Conducted**

- 1. National Workshop on MATLAB Programming, 08-11-2014
- 2. National Workshop on Math with Open Source Software, 3-4, September 2015
- 3. National Seminar on Emerging Trends in Pure and Applied Mathematics, 24-02-2017
- 4. International Seminar on Fluid Mechanics, 06-03-2017
- National Workshop on MATLAB in Applied Sciences, 15-16, September 2017
- 6. Winter Refresher Course in Mathematics, 1-3 February, 2018
- 7. International Conference on Pure and Applied Mathematics, 19-20 February 2018

- 8. Annual Conference on History and Development of Mathematics, 27-29, November 2018
- 9. International Seminar on Astronomical Mathematics, 30th November, 2018
- 10. Second International Conference on Pure and Applied Mathematics, 17-19, December 2018, sponsored by CSIR, New Delhi
- 11. International Workshop on Graph Theory and Its Applications, 20-21, December 2018
- 12. International Seminar on Complex Analysis, 21-03-2019

# Administrative Brief in SCSVMV:

- Head of the Department of Mathematics, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, from 01-01-2017 to 31-12-2022.
- Acted as Chief Superintendent, University Theory Examinations, November-December, 2022
- Nodal Officer, UGC/AISHE from 2015 to 2023
- Chairman-Statistics and Information Cell
- Worked as Assistant Chief Warden during 2014-2015
- Co-Coordinator, National Instituttional Ranking Framework for NIRF-2017, 2018, 2019, 2020, 2021, 2022 & 2023.
- Acted as Chief Superintendent, University Theory Examinations, March-June, 2017
- Co-coordinator-Curricular Aspects, Task Force Committee (TFC) in order to prepare of Self Study Report (SSR) for re-appraisal to NAAC.
- Member of Anti- Ragging Squad during 2014-2017
- Member of Students' Cabinet Advisory Committee from 2015 to till date
- Member of Students Counseling System from 2016 to till date

 $\bullet$  Chairman- Board of Studies, Department of Mathematics, from 2017 to 2022