

BIO-DATA

1. Personal Information

1. Name **Dr R. RANGARAJAN**
- Designation Professor, Chairman (2014-2016),
Deputy Co-ordinator UGC-SAP DRS-I(2012-17)
- Office DOS in Mathematics
University of Mysore
Manasagangotri, Mysuru– 570 006
- Residence # 9, B-5, Rangarao Colony
Ramakrishna Nagar, J Block
Dattagalli, Mysore-570 022
2. Email rajra63@gmail.com
rrangarajan@maths.uni-mysore.ac.in
3. Mobile +91 9611109079
Office 0821 2419828
4. Institution DOS in Mathematics, University of Mysore,
Manasagangotri, Mysuru– 570 006
5. Date of Birth 03-11-1963
6. Place of Birth Mysuru
7. Gender Male
8. Nationality India



2. Academic Qualification (Undergraduate Onwards)

SL.NO	Degree	Year	Subject	University/Institution	% of marks
1	B. Sc.	1984	P.C.M	University of Mysore, Mysore	First Class
2	M. Sc	1986	Mathematics	University of Mysore, Mysore	First Class II Rank
3	CSIR-JRF (NET)	1986	Mathematics	UGC - CSIR	
4	Ph.D.	1994	Mathematics	IIT Madras	

4.a) Ph.D. Thesis Title: **Some Studies on Pade Approximation and Related Continued Fractions with Applications**

- b) Guide's Name : Prof. P. Achuthan
 c) Institute/Organization : IIT Madras
 d) Year of Award : 1994

3. Teaching experience

Sl. No	Positions held	Name of the Institute	From	To	Pay Scale
1	Professor	University of Mysore	01-08-2011	till date	1,72,200
2	Chairman	University of Mysore	June 2014	May 2016	37,400-67,000 + AGP 10,000
3	Associate Professor	University of Mysore	01-08-2008	31-07-2011	37,400-67,000 + AGP 9,000
4	Reader (CAS)	University of Mysore	01-08-2005	31-07-2008	12,000-420-18,300
5	Senior Lecturer(CAS)	University of Mysore	01-08-2000	31-07-2005	10,000-325-15,200
6	Lecturer	University of Mysore	07-07-1999 (f/n)	31-07- 2000	8,000-275-13,500
7	Lecturer	Kuvempu University	9-8-96 (f/n)	6-7-99 (a/n)	8,000-275-13,500
8	Lecturer	PESIT, Bangalore	16-11-94	8-8-96 (a/n)	2,200 - 4500
9	Lecturer	DSCE, Bangalore	3-12-93 (f/n)	15-11-94 (a/n)	2,200 - 4500

4. Projects Details

Sl. No	PI/CO-PI	Title of the Project	Sponsoring Organization	Period of the Project	Sanctioned Amount
1	Dr. B.S. KIRANAGI Dr. R. RANGARAJAN	“Algebra Bundles(Alternative, Lie, Jordan)”	DST – SERB , Govt. of India	03-11-2014 to 02-11-2017	Rs.12,86,040/-
2	Dr. B. S. KIRANAGI Dr. R. RANGARAJAN	“Algebra Bundles(Alternative, Lie, Jordan)”	D.S.T, Govt. of India	16-09-2009 to 02-11-2014	Rs.9,14,400/-
3	Dr. R. Rangarajan	“Methods of Pade Approximation Related to Semi-Classical Orthogonal Polynomials in Nonlinear Dynamics”	D.S.T, Govt. of India	10-03-2010 to 09-03-2013	Rs.9,59,400/-

5. List of Publications in Journal

5. a. List of top 10 papers in Scopus

Document title	Authors	Year	Source	Cited by
Entire Zagreb indices of graphs	Alwardi, A., Alqesmah, A., Rangarajan, R., Cangul, I.N.	2018	Discrete Mathematics, Algorithms and Applications	1
A new combined homotopy-laplace decomposition method for solving DDEs of order (1,2)	Ananth Kumar, S.R., Rangarajan, R.	2018	Advanced Studies in Contemporary Mathematics (Kyungshang)	0
Homotopy-laplace decomposition method to solve nonlinear differential-difference equations	Rangarajan, R., Ananth Kumar, S.R.	2017	Journal of the Indian Mathematical Society	0
The minimum equitable dominating color energy of a graph	Rajendra, P., Rangarajan, R.	2015	Advanced Studies in Contemporary Mathematics (Kyungshang)	1
Four orthogonal polynomials connected to e^{-x}	Rangarajan, R., Shashikala, P.	2015	Journal of the Indian Mathematical Society	0
Laplace decomposition methods for solving certain	Rangarajan, R., Ananth Kumar,	2014	Journal of the Indian	1

class of differential-difference equations	S.R.		Mathematical Society	
Four orthogonal polynomials connected to a regular C-fraction with co-efficients as natural numbers	Rangarajan, R., Shaahikala, P.	2014	Advanced Studies in Contemporary Mathematics (Kyungshang)	0
Laplace decomposition method for solving certain differential-difference equations both of order 1	Ananth Kumar, S.R., Rangarajan, R.	2013	Advanced Studies in Contemporary Mathematics (Kyungshang)	0
A pair of classical orthogonal polynomials connected to Catalan numbers	Rangarajan, R., Shashikala, P.	2013	Advanced Studies in Contemporary Mathematics (Kyungshang)	5
Mth power symmetric n-sigraphs	Rangarajan, R., Siva Kota Reddy, P., Soner, N.D.	2012	Italian Journal of Pure and Applied Mathematics	0

5 b. List of papers in International journals:

1. On a continued fraction representation of general Cauchy third form, *Jour. Math. Phy. Sci*, **24**(6) (1990), 369-380 **(with P. Achuthan)**.
2. On Kdv solitons and Padé' Approximants, *Jour. Math. Phy. Sci*, **25**(3) (1991), 287-304 **(with P. Achuthan and R. Narasimhan)**.
3. On regular C-fraction and general T-fraction expansions for ratios of basic hypergeometric series and Ramanujan-type Identities, *Applied Numerical Mathematics*, **12** (1993), 297-313 **(with P. Achuthan)**.
4. The Brahmagupta Polynomials in Two Complex Variables and their Conjugates, *The*

- Fibonacci Quarterly*, **40(2)** (2002), 161-169 (with **H.S. Sudheer**).
5. Brahmagupta Polynomials Arising from the Skew-field of Quaternion, *South East Asian Journal of Mathematics and Mathematical Sciences*, **3(2)** (2005), 59-65 (with **B. Gayatri Devi**).
 6. A nonlinear impulsive integro-differential system with infinite memory, *Jornal of Science and Technology*, Yemen, **11(1)** (2006), 13-18 (with **Hamood A.K. Alhaddad**).
 7. Identity and Non-identity Graphs on n-Sigraphs, *International J. of Math. Sci. & Engg. Appls.* **2** (III)(2008), 111-117 (with **P. Siva kota Reddy**).
 8. Notions of Balance in Symmetric n-Sigraphs, *Proceedings of the Jangjeon Math. Soc.*, **11(2)** (2008), 145-151 (with **P. Siva kota Reddy**).
 9. Switching Equivalence in Symmetric n-Sigraphs, *Adv. Stud. Comtemp. Math.*, **18(1)** (2009), 79-85 (with **P. Siva kota Reddy and M. S. Subramanya**).
 10. Notions of balance and consistency on symmetric n-marked graphs, *Bul. Pure & Appl. Math*, **3(1)** (2009), 1-8 (with **P. Siva kota Reddy**).
 11. The H-line signed graph of a signed graph, *Intenational J.Math. Combin.*, **2(2010)** , 37-43 (with **M. S. Subramanya and P. Siva kota Reddy**).
 12. The Edge C_4 signed graph of a signed graph, *Southeast Asian Bulletin of Mathematics*, **34(2010)**, 1077-1082 (with **P. Siva kota Reddy**).
 13. A result of Ramanujan and Brahmagupta Polynomials described by a Matrix Identity, *Intenational J.Math. Combin.*, **3(2010)** , 57-63.
 14. Numerical-Analytic methods for nonlinear diffusion type differential equations of heat transfer, *Journal of the Indian Mathematical Society*, **77** (01-04) (2010), 159-166 (with **H. Muneer Basha**).
 15. A novel approximate method for a nonlinear heat transfer problem, *International J. of Math. Sci. & Engg. Appls.* **5** (I)(2011), 61-67 (with **H. Muneer Basha**).
 16. Switching invariant neighbourhood signed graphs, *Proceedings of the Jangjeon Math. Soc.*, **14(2)** (2011), 249-258 (with **M. S. Subramanya and P. Siva kota Reddy**).
 17. Neighbourhood signed graphs, *Southeast Asian Bulletin of Mathematics*, **36(2012)**, 389-397 (with **M. S. Subramanya and P. Siva kota Reddy**).
 18. m^{th} Power symmetric n-sigraphs, *Italian Journal of Pure and Applied Mathematics*, **29(2012)**, 87-92 (with **P. Siva kota Reddy and N. D. Soner**).
 19. Combination of two analytical approximations and Pade approximants for Volterra's population model, *International Electronic Engineering Mathematical Society*, **12(2012)**, 1-8 (with **N. Nanjundaswamy**).

20. On three techniques of approximations for Volterra's population-type model, *Advanced Studies in Contemporary Mathematics*, **22**(4) (2012), 579-586 **(with N. Nanjundaswamy)**.
21. Applicability of Laplace decomposition method for solving certain differential-difference equations of order (1, 2), *Bulletin of the International Mathematical Virtual Institute*, **3** (2013), 103-111 **(with Ananth Kumar S. R.)**.
22. A pair of classical orthogonal polynomials connected to Catalan numbers, *Advanced Studies in Contemporary Mathematics*, **23** (2) (2013), 323-335 **(with P. Shashikala)**.
23. Laplace decomposition method for solving certain differential-difference equations both of order 1, *Advanced Studies in Contemporary Mathematics*, **23** (3) (2013), 501-508 **(with Ananth Kumar S. R.)**.
24. Computation of four orthogonal polynomials connected to Euler's generating function of Factorials, *International Journal of Mathematical Combinatorics*, **04** (2013), 49-57 **(with Shashikala P.)**
25. Four orthogonal polynomials connected to a parameter function of Mittag-Leffler type, *Bulletin of the International Mathematical Virtual Institute*, **04** (2014), 81-88 **(with Shashikala P)**.
26. Laplace decomposition methods for solving certain class of differential-difference equations, *Journal of the Indian Mathematical Society*, **81** (03-04) (2014), 357-367 **(with Ananth Kumar S. R.)**.
27. Four orthogonal polynomials connected to a regular C-fraction with Co-efficients as Natural numbers, *Advanced Studies in Contemporary Mathematics*, **24** (4) (2014), 459-465 **(with Shashikala P)**.
28. Determinant and Pseudo-determinant of Tadpole Graphs and its Line Graphs, *International Journal of Mathematical Sciences and Engineering Applications*, **08** (VI) (2014), 51-60 **(with P. Rajendra)**.
29. Four Orthogonal Polynomials Connected to e^{-x} , *Journal of the Indian Mathematical Society*, **82**(1-2)(2015), 147-154 **(with Shashikala P)**.
30. The Minimum Equitable Dominating Color Energy of A Graph, *Advanced Studies in Contemporary Mathematics*, **25**(3) (2015), 369-378 **(with Rajendra P)**.
31. The Minimum Equitable Domination Energy of a Graph, *International Journal of Mathematical Combinatorics*, **03** (2015), 62-72 **(with Rajendra P)**.
32. Minimum Covering Color Energy of a Graph, *International Journal of Mathematical Sciences and Engineering Applications*, **9**(I)(2015), 129-141 **(with P. Rajendra)**.
33. On V_n - Arithmetic Graph, *International Journal of Computer Applications*, **125**(09) (2015), 01-07 **(with Akram Alqesmah and Anwar Alwardi)**.

34. Tchebychev and Brahmagupta Polynomials and Golden Ratio: Two New Interconnections, *International Journal of Mathematical Combinatorics*, **3** (2016), 57-67 **(with Shashikala P)**.
35. Equitable and Non-Equitable Zagreb Indices of Graphs, *International Journal of Mathematics and its Applications*, **4(2-D)** (2016), 57-65 **(with Akram Alqesmah and Anwar Alwardi)**.
36. Independent Injective Domination of Graphs, *International Journal of Advances in Applied Mathematics and Mechanics*, **3(4)** (2016), 142-151 **(with Akram Alqesmah and Anwar Alwardi)**.
37. Determinant and Pseudo-determinant of Adjacency Matrices of Derived Graphs, *International Journal of Computer Trends and Technology (IJCTT)*, **38(3)** (2016), 47-52 (with **Rajendra P.**).
38. Certain Combinatorial Properties of Twin Triplets Related to Tchebychev Polynomials, *International Journal of Mathematics and its Applications*, **4(4)** (2016), 01-10 **(with Shashikala P and Honnegowda C K)**.
39. Certain Combinatorial Identities of Twin Pairs Related to Tchebychev Polynomials, *International Journal of Computer Applications*, **154(5)** (2016), 01-05 **(with Shashikala P and Honnegowda C K)**.
40. Connected Injective Domination of Graphs, *Bulletin of the International Mathematical Virtual Institute*, **7** (2017), 73-83 **(with Akram Alqesmah and Anwar Alwardi)**.
41. Certain Combinatorial Results on Two variable Hybrid Fibonacci Polynomials, *International Journal of Computational and Applied Mathematics*, **12(2)**(2017), 603-613 **(with Honnegowda C K and Shashikala P)**.
42. Edge Injective Domination of Graphs, *Gulf Journal of Mathematics*, **5(2)**(2017), 46-55 **(with Akram Alqesmah and Anwar Alwardi)**.
43. Homotopy-Laplace decomposition method to solve non-linear differential-difference equations, *Journal of the Indian Mathematical Society*, **84(03-04)** (2017), 255-268 **(with Ananth Kumar S. R.)**.
44. Convolution Identities Involving fixed power of expanding variable, Hybrid Fibonacci and Lucas Polynomials *International Journal of Mathematical Sciences and Engineering Applications*, **11** (II) (2017) 99-110 **(with Honnegowda C K and Rangaswamy)**.
45. Binomial Convolution Identities of, Hybrid Fibonacci and Lucas Polynomials, *International Journal of Mathematical Sciences and Engineering Applications*, **11** (III) (2017) 101-111 **(With Honnegowda C K and Rangaswamy)**.
46. Convolution Identities of Two variable Tchebychev polynomials, *Asian Journal of Mathematics and Computer Research*, **22** (1), (2017) 31-42 **(With Honnegowda C K)**.
47. A Two variable Lucas Polynomials corresponding to Hybrid Fibonacci Polynomials, *Global Journal of Pure and Applied Mathematics*, **13(6)**(2017), 1669-1682 **(with HonnegowdaCK and Shashikala P)**.

48. On the Injective Domination of Graphs, *Palestine Journal of Mathematics*, 7(1) (2018), 202-210 **(with Akram Alqesmah and Anwar Alwardi)**.
49. On the Injective Domination polynomial of Graphs, *Palestine Journal of Mathematics*, 7(1) (2018), 234-242 **(with Akram Alqesmah and Anwar Alwardi)**.
50. A New Combined Homotopy-Laplace Decomposition Method for solving DDEs of order(1,2), *Advanced Studies in Contemporary Mathematics*, 28 (2018), No. 1, pp. 13 - 25 **(With Ananth Kumar S. R.)**.
51. Entire Zagreb indices of graphs , *Discrete Mathematics, Algorithms and Applications*, 10(3) (2018) 1850037(16 pages)**(With Alwardi, A., Alqesmah, A., Cangul, I.N.)**.
52. Injective and Relative Injective Zagreb Indices of Graphs, *Konuralp Journal of Mathematics*, 6 (1) (2018) 117-127 **(With Akram Alqesmah1, Anwar Alwardi)**.
53. A New Application of G'/G -Expansion Method for Travelling Wave Solutions of Fractional PDEs, *International Journal of Applied Engineering Research*, 13(11) (2018) 9936- 9942 **(With Chandrali Baishya)**.
54. Analysis Of Lane-Emden Equation By Using Nonstandard Finite Difference Methods, *Asian Journal of Mathematics and Computer Research* 24(3) (2018) 158-170 **(With Chandrali Baishya)**.
55. Binet Forms Involving Golden Ratio and Two Variables: Convolution Identities, *Journal of Informatics and Mathematical Sciences* 10(1 & 2) (2018) 227–236 **(With Honnegowda C.K.)**.
56. Convolution Identities Of Two Variable Polynomials Related To Brahmagupta Polynomials, *Journal of Computer and Mathematical Sciences*, 9(12) (2018) 2055-2064 **(With Honnegowda C.K.)**.
57. Minimum Equitable Dominating Randić ' Energy of a Graph, *Math.Combin.Book Ser. Vol.1*(2018), 97-108 **(With Rajendra P.)**.
58. Orthogonal Polynomials Connected to Stern-Stolz Series, *Palestine Journal of Mathematics* 8(1)(2019) , 262–271 **(With Shashikala P.)**.
59. Global 2-Rainbow Domination In Graphs, *Electronic Journal of Mathematical Analysis and Applications* 7(1) (2019) 130-139 **(With Akram Alqesmah1, Anwar Alwardi)**.
60. Some Parameters Of The V_n -Arithmetic Graph, *Journal Of The International Mathematical Virtual Institute*, 9(2019), 139-153 **(With Akram Alqesmah1, Anwar Alwardi)**.

5 b. List of papers in national journals:

1. New Perturbation series solutions for Fischer's equation, *Journal of the Karnatak University*, 43(1999), 1-11.
2. A Vedic-type Sutra for Approximate Value of $\bar{O}N$, *Applied Science Periodical*, 4(3) (2002), 152-158 **(with Rangaswamy)**.

3. The Brahmagupta polynomials extended by generalized golden ratio, *Journal of Mathematical Analysis and Applications*, **1(2)** (2005), 157-168 **(with Rangaswamy and E. R. Suryanarayan)**.
4. Orthogonal polynomials of continued fractions and Brahmagupta polynomials, *Journal of Mathematical Analysis and Applications*, **1(2)** (2005), 169-181 **(with Rangaswamy)**.
5. A nonlinear impulsive integro-differential system I, *Journal of Analysis and Computation*, **2(2)** (2006), 125-131 **(with Hamood A.K. Alhaddad)**.
6. A nonlinear impulsive integro-differential system II, *Journal of Analysis and Computation*, **2(2)** (2006), 133-140 **(with Hamood A.K. Alhaddad)**.
7. A nonlinear impulsive differential system, *Ultra Science(IJPS)*, **19(2)M** (2007), 377-382 **(with Hamood A.K. Alhaddad)**.
8. A regular perturbation method for Fisher-Kolmogorov type PDEs, *Ultra Science(IJPS)*, **19(3)M** (2007), 503-510 **(with Chandrali Baishya)**.
9. Geometric models for the multiplication of octonions and sedenions, *Journal of Analysis and Computation*, **3(2)** (2007), 147-152 **(with B. Gayathri Devi)**.
10. Perturbation and Painleve' analysis for potential KdV and SSD equations, *Journal of Mathematical Analysis and Applications*, **3(1)** (2007), 7-14 **(with Chandrali Baishya)**.
11. A perturbation series solution for KdV-Burger equation, *Journal of Mathematical Analysis and Applications*, **3(1)** (2007), 15-21 **(with Chandrali Baishya)**.
12. Global Analysis of a Lotka-Volterra Predator-Prey Model with Intraspecies competition, *Journal of Analysis and Computation*, **4(1)** (2008): 43-50 **(with M.H. Rahmani Doust)**.
13. Analysis of a Predator-Prey Model with Intraspecies Coexistence, *Ultra Science(IJPS)*, **20(3)M** (2008), 819-824 **(with M.H. Rahmani Doust and M. N. Modoodi)**.
14. Switching Invariant 2-path Sigraphs, *mySCIENCE (Biannual Science Journal of the University of Mysore)*, **III(1)**(2008), 20-25 **(with P. Siva kota Reddy)**.
15. Switching Equivalence in Symmetric n-Sigraphs-II, *Journal of the Orissa Mathematical Society*, **28(1&2)**(2009), 1-12 **(with P. Siva kota Reddy and N. D. Soner)**.
16. Computation with Adomain decomposition method for solving a general Integro-differential equation, *IRFSA(IJC)*, **2(4)**(2012), 809-818 **(with N. Nanjundaswamy)**.
17. A Laplace decomposition methods for solving an Integro-differential-difference equation, *IRFSA(IJC)*, **2(4)**(2012), 819-829 **(with Ananth Kumar S. R.)**.
18. Computation of Spectral Parameters of Graphs, *IRFSA(IJC)*, **4(4)** (2014), 838-849 **(with P. Rajendra)**.

5c. List of Publications in International Conference Proceedings

1. Continued Fraction Solutions of Matrix Riccati Equation, *Proceedings of the International Conference: Mathematical Theory of Control*, Edited by M. C. Joshi and A. V. Balakrishnan, Marcel Dekker, Inc. (1993), 1-10 **(with P. Achuthan)**.
2. The Brahmagupta Matrix and its Application to Tiling, in *Special Functions, Proceedings of the International Workshop held at the City University of Hong Kong, June 21-25, 1999*. Edited by Charles Dunkl, Mourad Ismail and Roderick Wong. World Scientific, Hong Kong (2000), 282-292 (with E.R. Suryanarayan).
3. On Mathematical Analysis of Certain Orthogonal Polynomials, *Proceedings of the International Conference on Differential Geometry, Analysis and Fluid Mechanics (ICDGAFM -2016)*, Kuvempu University, Shankaraghatta, Shimoga, February 04 -05, 2016, 68-80.

5d. List of Publications in National Conference Proceedings

1. Sums of Reciprocals Diverging To Infinity Without Hitting Any Integer, *Challenges of the 21st century in Mathematics and its Allied Topics, Proceedings of the National Seminar, University of Mysore, Mysore, February 2-3, 2001*, Ed. by B.S.Kiranagi University of Mysore (2001), 236-241 **(with E. R. Suryanarayan)**.
2. A Continued Fraction Expansion of \sqrt{N} Involving a Positive Rational Solution of $x^2 - N y^2 = -1$, *Challenges of the 21st century in Mathematics and its Allied Topics, Proceedings of the National Seminar, University of Mysore, Mysore, February 2-3, 2001*, Ed. by B.S.Kiranagi University of Mysore (2001), 224-231 **(with Rangaswamy)**.
3. On a new norm with an important role in computational vedic mathematics, *Proceedings of National Workshop on Computational Vedic Mathematics*, East-West Institute of Technology, Bangalore, March 3-4, 2002, Ed. By K. N. Balasubramanya Murthy and B. S. Ramesh, 39-46 (2002).
4. On circulant Matrices representing certain direct graphs and magical semigraphs, *Proceedings of the KMA National Seminar on Graph Theory*, St. Mary's college, Trissur, September 5-7, 2002, Ed by T. Thrivikraman, S. Kuriokose and N. Kalayani Kutty, 145-151 (2002) **(with S. R. Sudharshan)**.
5. Properties of Brahmagupta Polynomials with two Parameters, *Proceedings of the Third Annual Conference of the Society for Special Functions and their Applications*, BHU,

- Varanasi, March 4-6, 2002. Editors R. S. Pathak, A. K. Agarwal and M. A. Pathan, Society for Special Functions and their Applications (2003), 57-69. **(with E.R. Suryanarayan and Rangaswamy)**.
6. Application of Pade Approximation in solving certain nonlinear PDE's, *Proceedings of the National Seminar on the Analysis of PDES*, Pondicherry University, Puducherry, December 18-19, 2009.
 7. Mathematical modeling and computational aspects of nonlinear heat transfer problems, *Proceedings of the National Conference on Mathematical Modeling: A Socio-Scientific Approach*, Tumkur University, Bangalore, November 30, 2011. 32-57.
 8. Exact methods for solving differential-difference equations, *Proceedings of the National Conference on Mathematical Modeling: A Socio-Scientific Approach*, Tumkur University, Bangalore, November 30, 2011. 58-68 **(with Ananth Kumar S. R.)**.
 9. Numerical – Analytic method for solving a non-linear Integro-differential equation, *Proceedings of the National Conference on Mathematical Modeling: A Socio-Scientific Approach*, Tumkur University, Bangalore, November 30, 2011. 95-108 **(with N. Nanjundaswamy)**.
 10. Number Theoretic Properties of Two Variable Tchebyshev Polynomials Evaluated at Integer Values, *Proceedings of the National Conference on Recent Developments in Mathematics and their Applications*, Tumkur University, Tumkur, October 17– 18 , 2014.

6. Books/Reports/Chapters/General articles etc.

1. Numerical Analysis, Self-Study Material, KSOU, Mysore, 2011.
2. Measure and Integration, Self-Study Material, KSOU, Mysore, 2012.
3. Functional Analysis, Self-Study Material, KSOU, Mysore, 2013.

7a. List of Post Doctoral Students Guided

SL NO	Name	Title of Work	Remark
1	Dr. Shashikala P	Studies on Orthogonal Polynomials related to Continued Fractions	completed in 2018
2	Dr. Anwar Alwardi	Studies on Graph theory and its applications	completed in 2018

7b. List of PhD Students Guided

SL NO	Name	Thesis Title	Award
1	Hamood A. K. Alhaddad	“A Study on Integro-Differential Equations”	2007
2	Rangaswamy	“Studies on Brahmagupta Polynomials and Continued Fractions with some Interconnections”	2007
3	Gayatri Devi B.	“Studies on Brahmagupta Polynomials in Two Complex and Hypercomplex Variables”	2009
4	Siva kota Reddy P.	“ Some Studies on Signed Graphs and their Applications”	2009
5	Chandrali Baishya	“ Studies on Numerical and Approximate Solutions of nonlinear Differential Equations”	2009
6	Rahmani Doust M. H.	“A Study on Systems of nonlinear Differential Equations and Applications”	2009
7	Rajendra R.	“ Some Studies on Algebra Bundles”	2009
8	Muneer Basha H.	“Studies on Partial differential equations of heat transfer using certain numerical – analytic methods”	2009
9	Nanjundaswamy N.	“ Numerical-Analytical method for solving certain Integro-Differential Equations”	2009
10	Ananth Kumar S. R.	“ Some Studies on differential equations applicable to differential-difference equations ”	2009
11	Shashikala P.	“Studies on Mathematical Analysis of Orthogonal Polynomials”	2009
12	Rajendra P.	“On Some Aspects of Graphs and Their Applications”	2009

13	Honnegowda C.K	“Studies on some aspects of Combinatorial Number Theory”	2018
14	Akram Aqeel Ali Alqesmah	“Some contributions to the Theory of Graph and its Applications”	2019
15	Ajaykumar.K	“Some topics in Lie Algebra and Lie group bundles”	2020
16	Madhu.B	“Some topics on smooth Lie algebra Bundles”	On going

7c. List of M.Phil. Students Guided

SL NO	Name	Thesis Title	Award
1	M. Nanjundaswamy	Continued fraction expansions, q-series product interconnections and Ramanujan identities	2002
2	Yogeesha K. M	A study on acceleration of convergence algorithms of numerical analysis	2002
3	M.R.Rajesh Kanna	Studies on Pade Approximation methods for solving certain nonlinear differential equations	2002
4	C. Manjunath	Geometry of Characteristics for Partial differential equations	2003
5	M. S. Ramesh	A Study on generating functions of certain numbers and special functions	2004
6	C. S. Shiva Kumar Swamy	Study on Taylor’s series Approximation and related continued fraction	2004
7	Swamy	On a study of certain partial differential equations using special functions	2004
8	Guru Prasad P. S.	Geometrical and physical applications of quadratic forms	2005
9	Kemparaju R.	A study on directed graphs	2006
10	Nanjundaswamy N.	A vector space associated with a graph theory	2006
11	Sudhakara K. B.	Some applications of directed graphs	2007

12	Rashmi S.	A study on Banach* - algebra	2007
13	S. Leena Maria	A study on simple continued fractions related to Pade approximants	2008
14	Prem Kumar L.	The most general form of Frobenius series method	2009
15	Ravi A. R.	The study of Legendre Polynomials	2010
16	Pushpa D. P	Similarities between Fourier and Power series	2011
17	Roopa P.	A simpler method to find radius of convergence of power series solution to linear differential equation	2011
18	M. S. Surekha	Computation of certain Pade approximants related to simple continued fractions	2012
19	Veeranayaka T. N	Pade approximation, related continued fractions and some applications	2013
20	Maragadam A. S.	Study of standard results on continuity and differentiability of functions defined on compact subsets of R_n	2013
21	Sunitha Devi	Lie Algebra	2014

8. List of Conference/ Seminar/Workshop/Refresher Course/Symposium Participated

Sl No.	Name Conference/ Seminar/ Workshop/ Refresher Course/ Symposium	Name of the Organiser	Title(s) of the paper(s) presented	Date & Place of the programme	Whether National / International
1	International conference on Mathematical Theory of Control	Dept. of Mathematics and systems and control engineering	Continued fraction solution for differential matrix Riccati equation	December 10-15, 1990 IIT, Bombay	International
2	Seminar on Science and Technology in Ancient India	Institute for Oriental study	Participated	April 25-26, 1998 Thane	National
3	National symposium on Analysis and its applications	Karnatak University, CSIR, DST, AICTE	Correspondence and convergence analysis for	June 08-10, 1998	National

		and NBHM	continued fractions	Dharwad	
4	Refresher course in Mathematics	UGC	Participated	November 30th– December 21st, 1998 Shankaraghatta, Shimoga	National
5	International Workshop on Special Functions Asymptotics, Harmonic Analysis and Mathematical Physics	City University of Hong Kong	Brahmagupta Polynomials on Two Parameters	June 21-25, 1999 Hong Kong	International
6	Regional Training Course on Computer Applications in Mathematics Teaching	UNESCO	Participated	January 4-18, 2000 IIT Kharagpur	National
7	Refresher course in Mathematics	UGC-Academic Staff college	Participated	November 02-22, 2000 University of Mysore, Mysore	National
8	National Workshop on Computational Vedic Mathematics	East-West Institute of Technology	Participated	May 03-04, 2002 Bangalore	National
9	International conference and Instructional Workshop on Industrial Mathematics	Industrial Mathematics Group	A Convection – Dissipation model for global warming	December 02-09, 2002 IIT, Bombay	International
10	Orientation Programme	UGC	Participated	March 03-30, 2003 University of Mysore, Mysore	National
11	14th International Conference of the Jangjeon Mathematical Society	Jangjeon Mathematical Society	Hypergeometric Perturbation series solution for KDV-Burger's equations	December 22-24, 2003 DOS in Mathematics, Mysore	International
12	International Symposium on Advances in Fluid Mechanics	UGC-CAS in Fluid Mechanics	Pade Approximation Techniques for Approximate Solutions in Solitary Wave Form Huxley and Burger-Huxley equations	June 21-22, 2004 Bangalore University, Bangalore	International
13	Second National Conference on Mechanical Engineering	Ghousia college of Engineering	Modeling studies on AL6061-SiC Composites	March	National

	(NATCON. ME-2005)			11-12, 2005 Ramanagaram	
14	Instructional School on Computational PDEs(CPDE-05)	Industrial Mathematics Group	Participated	June 05-24, 2005 IIT, Bombay	National
15	National Conference on Differential Equations and Applications (NCDEA-2006)	CSIR	A nonlinear impulsive integro-differential system involving an additional integral operator with infinite memory	September 28-29, 2006 Periyar University, Salem	National
16	19th International conference of the Jangjeon Mathematical Society	Jangjeon Mathematical Society	Participated	February 22-24, 2007 Bangalore University, Bangalore	International
17	22nd Annual conference of Ramanujan Mathematical Society	NITK	Fibonacci – Brahmagupta Matrix Identity and related results	June 06-08, 2007 Dept. of Mathematical and Computational Sciences, NITK, Surathkal	National
18	National level Seminar on Frontiers of Mathematics and Applications	Sona College of Technology	Participated	February 15th 2008 Salem	National
19	International Conference on Discrete Mathematics	DST and CSIR	Participated	June 06-10, 2008 Mysore	International
20	Instructional Workshop on Differential Geometry	NBHM	Participated	June 16-25, 2008 University of Mysore, DOS in Mathematics, Mysore	National
21	International Conference on Frontiers in Fluid Mechanics(ICFFM-2009)	UGC-CAS in Fluid Mechanics	Participated	August 31st -September 2nd 2009 Bangalore University, Bangalore	International

22	Indo-German Workshop-cum-lecture series on computational models and methods driven by Industrial problems	IIT Madras	Participated	January 05-16, 2009	National
23	National Seminar on Applications of Algebra and Number Theory	UGC	Notions of balance in Symmetric n-sigraphs	December 04-05, 2009 Dept. of Mathematics, National college, Tiruchirapalli	National
24	National Seminar on Analysis of Partial Differential Equations	UGC-SAP-DRS-I	Applications of PADE approximation in solving certain nonlinear PDES	December 18-19, 2009 Pondicherry University, Pondicherry	National
25	Two days workshop on the vision group of Mathematics & Computer Science	Dept of Science & Technology, Govt. of Karnataka	Participated	March 19-20, 2010 Kuvempu University, Shankaraghatta, Shimoga	National
26	The National conference on the works of Srinivasa Ramanujan	University of Mysore	On a pair of results of Ramanujan	July 03rd, 2010 DOS in Mathematics, Mysore	National
27	International Congress of Mathematicians	University of Hyderabad	Participated	August 19-27, 2010 Hyderabad	International
28	National Level Seminar on Mathematical Sciences – A key to engineering and Technology	Sona College of Technology	Application of continued fractions in science and technology	October 29th 2010 Salem	National
29	National Seminar on Recent advances in Differential equations and its applications	UGC	On mathematical analysis techniques and applications to nonlinear differential equations	February 10-11, 2011 Kandaswami Kandar's college, Velur	National
30	National conference on Frontiers in Fluid Mechanics	UGC	On Pade approximation technique, orthogonal polynomials and their application to nonlinear problems	February 22-23, 2011 Gulbarga University, Gulbarga	National

31	National conference on applications of Mathematics and Statistics	UGC	Chairing a session	March 25-26, 2011 Yuvaraja's college, Mysore	National
32	Two day Inter University subject based conference on Mathematics/ Computer Science	Vision group on Science and technology, Bangalore	Participated	May 21-22, 2011 Rani Channamma University, Belagavi	National
33	National conference on applied and Engineering Mathematics (NCAEM-2011)	DST	Mathematical Analysis & Applications of classical and semi-classical orthogonal polynomials	July 28-30, 2011 RNS Institute of Technology, Bengaluru	National
34	National conference on Mathematical modeling : A socio-scientific approach	Karnataka state higher education council & centre for Industrial and applied mathematics, Tumkur University	Mathematical modeling and computational aspects of nonlinear heat transfer problems	November 30th 2011 Bengaluru	National
35	2nd Refresher course in mathematical sciences on the thrust area Analysis and applications	UGC- Academic Staff college	Co-ordinator	January 09-29, 2012 University of Mysore, Mysore	National
36	National Seminar on Algebra, Analysis and Discrete Mathematics (NSAADM-2012)	SAP	Analysis of certain orthogonal polynomials related to continued fractions	February 08-10, 2012 University of Kerala, Thiruvananthapuram	National
37	National conference on Functional analysis and its applications (FAA-2012)	UGC	Chaired a session	February 17-18, 2012 PES college of Science, Arts & Commerce, Mandya	National
38	One day state level seminar on recent trends in mathematics and its applications	Govt. of Karnataka, Dept. of collegiate education	Resource person	February 28th 2012 Dept. of Mathematics, Govt. college Mandya	State
39	National seminar on recent developments in Mathematics and its applications	UGC	Mathematical analysis of certain orthogonal polynomials related to continued fractions	March 08-09, 2012 Kandaswami Kandar's college,	National

				Velur	
40	National Conference on Graph Theory And Number Theory –NCGTNT-2012	UGC-SAP-DRS-I	organiser	March 21-22, 2012 University of Mysore, DOS in Mathematics, Mysore	National
41	National Conference on Analysis and its Applications	Sri Adichunchanagiri Shikshana Trust(R.)		June 23-24, 2012 AIT, Chikmagalur	National
42	One day seminar on Curriculum development in Mathematics	JSS Mahavidyapeeta	Curriculum development in calculus	September 29th 2012 JSS college for women, Saraswathipuram, Mysore	
43	Two day National seminar on recent trends in information Technology and Animation, Visual effects and gaming	University of Mysore		November 09-10, 2012 CIST, Mysore	National
44	Three day workshop on field theory via geometry and number theory	University of Mysore and IMSc Chennai		February 04-06, 2013 University of Mysore, DOS in Mathematics, Mysore	
45	National seminar on recent developments in mathematical sciences (NSRDMS-2013)	UGC-SAP	Two perturbation methods for solving certain nonlinear partial differential equations	June 28th, 2013 SV University, Tirupati	National
46	26th International conference of Jangjeon Mathematical Society	Jangjeon Mathematical Society	Results on evaluation by Chebyshev polynomials, golden ratio and Sulvasutra for $\sqrt{2}$	August 01-04, 2013 Acharya Institute of Graduate Studies, Bangalore	International
47	International seminar on recent trends in Mathematics	UGC		August 6th 2013 Department of Mathematics, JSS College of Arts, Commerce and Science, Ooty Road, Mysuru	International
48	Three day workshop on an introduction to algebraic	University of Mysore and IMSc Chennai		August	

	number theory via quadratic fields			22-24, 2013 University of Mysore, DOS in Mathematics, Mysore	
49	National level seminar on numerical analysis and its applications	UGC	Pade approximations and its applications in numerical analysis	January 10-11, 2014 Department of Mathematics, Gokhale Centenary College, Ankola.	National
50	One Day National Conference on Recent Advances in Mathematics (NCRAM -2014)	JSS Maha vidyapeeta	Numerical Techniques	January 24th, 2014 Department of Mathematics, JSS College of Arts, Commerce and Science, Ooty Road, Mysuru	National
51	Two day workshop on multimedia teaching – learning resource creation for on-line access	MLRCC UPE scheme of UGC and University of Mysore		March 06-07, 2014 University of Mysore, EMRC, Mysore	
52	National Conference on Emerging Trends in Mathematics	Govt. of Karnataka, Dept. of collegiate education	Mathematical modelling and its Applications	April 25th, 2014 Govt.Science college, Bangalore	National
53	One Week Faculty Development Program on Linear Algebra and its Applications	TEQIP- II	Linear Algebra and its Applications to Differential Equations I, II	June 16 -20, 2014 BMSC, Bengaluru	
54	International Conference on Emerging Trends in Mathematical Sciences	V.S.K. University	Laplace Decomposition Method for solving certain class of Differential – Difference Equations	July 25-26, 2014 Bellary	International
55	National Conference on Advances in Geometry, Analysis and Fluid Mechanics	Kuvempu University	Numerical Analytic techniques for solving Volterra and Volterra-Type Population Models	August 26 – 27, 2014 Shankaraghatta, Shimoga	National
56	National Conference on Recent Developments in Mathematics and their Applications	UGC	Number Theoretic Properties of Two Variable Tchebyshev Polynomials Evaluated at Integer Values	October 17 – 18, 2014 Tumkur	National
57	Two Day National Seminar	UGC	Group of Linear	December	National

	on Recent Developments in Mathematics and its Applications		Transformations Related to Invariance of Linear Orders	22-23, 2014, Acharya Nagarjuna University, Guntur	
58	Two Day International Conference on Mathematics – Yesterday and Today	UGC	Chaired a Session	December 26– 27, 2014, Mysuru	International
59	National Conference on Applied Mathematics: Numerical Analysis, Algebra and Computational Mathematics	UGC	Numerical Analysis of Approximating Functions with Hermite Interpolation Property	January 30– 31, 2015 Haveri	National
60	National Conference on Mathematical Applications in Engineering and Technology	Sacred Heart College	Adomian Decomposition Method for Solving Integro-Differential Equations	February 11– 12, 2015 Tamil Nadu	National
61	One Day National Conference on Mathematics and its Applications	UGC	Organizer	February 21st 2015 Mysuru	National
62	Two Days National Conference on Impact of Information Technology, Animation, Gaming & VFX on Society	UGC		May 18 – 19, 2015 University of Mysore, CIST, Mysuru	National
63	One Day Workshop on Mathematics Practicals (with FOSS Tools)	People’s Education trust (R.)		August 1st , 2015 PES College of Science, Arts and Commerce, Mandya	
64	Two Days National Workshop on Algebra	IOE, UOM	Organizer	August 22– 23, 2015, University of Mysore, DOS in Mathematics Mysuru	National
65	One Day National Conference on Graph Theory and Number Theory	UGC SAP DRS-I	Organizer	August 24th , 2015, University of Mysore, DOS in Mathematics Mysuru	National
66	103rd Indian Science Congress	The Indian Science Congress Association	Sub-Committee member and Participated	January 03– 07, 2016 University of Mysore, Mysuru	International
67	International Conference on Differential Geometry, Analysis and Fluid Mechanics (ICDGFAM -2016)	Kuvempu University	On Mathematical Analysis of Certain Orthogonal Polynomials	February 04 -05, 2016 Shankaraghatta, Shimoga	International
68	Two Days National	IOE, UOM	Organizer	February 26 – 27,	National

	Workshop on Number Theory and Works of Srinivasa Ramanujan			2016 University of Mysore, DOS in Mathematics Mysuru	
69	Two Day National Conference on Energy of Graphs (NCEG-2016)	UGC	Chaired a Session	March 11 -12, 2016 Maharani's Science College for Women Mysuru	National
70	The 29th International Conference of Jangjeon Mathematical Society on Number Theory, Special Functions and its Applications	Jangjeon Mathematical Society	Combinatorial Results on Orthogonal Polynomials given by Continued Fraction Expansions of Functions Related to Hypergeometric Family	August 08 – 10, 2016 Pondicherry University Puducherry	International
71	Two Weeks Faculty Development Program on Graph Theory-Algorithms and Applications	TEQIP - II	Problem Solving Approach in Graph Theory – I, II	December 26th , 2016 – January 7th , 2017 BMSC, Bengaluru	State level
72	International Conference on Recent Advances in Analysis and its Applications (ICRA3 '17)	Vivekanandha Educational Institute for Women	Applications of Differential Equations	January 30-31, 2017 Vivekanandha College of Arts & Sciences for women Tiruchegudu, Tamilnadu	International
73	One day Work shop on Algebra and its Applications	Bharathi college	Invited Talk: Rings, fields and their Applications	9th Sept 2017.Bharathi College, Bharathi Nagara, Maddur (Tq) Mandya.Dist	State Level
74	Two day National Conference on Recent Advances In Mathematical Sciences and Applications.	DOSR in Mathematics, Tumkur University, Tumkur.	Invited Talk: On Modelling and Application of Numerical-Analytical Methods or Non Linear Methods	December 1 -2, 2017 Tumkur university, Tumkur	National
75	Two day National Conference on Geometric function Theory and its Applications	University With Potential Excellence	Chaired a Session	January 29 -30, 2018 Yuvarajas college Mysuru	National
76	One day National Conference on Advances in Applied Mathematics.	University College of Science, Tumkur.	Invited Talk: Pade Approximation and its Applications in Numerical Analysis.	February 8th 2018 University college of Science, Tumkur	National
77	One Day National Conference on "Mathematical Combinatorics And Its Applications"	Bharathinagara, Maddur Tq., Mandya Dist.	Invited Talk: Advanced topics in analysis and its applications	on September 2018.	National

77.	National Conference on CURRENT TRENDS IN MATHEMATICS (NCCTM-2019)	JSS College of Arts, Commerce and Science, Ooty Road, Mysuru.	Chaired a Session	21 & 22 February 2019	National
78.	National Conference on Nonlinear Analysis: Theory and Applications	Bharathiar University, Coimbatore.	An application of Homotopy analysis for nonlinear problems	February 25-26, 2019'	International
79.	International Conference on Number Theory and Graph Theory	Department of Studies in Mathematics, University of Mysore, Mysuru	Participated	June 27-29, 2019.	International