

Qualification

Degree	Branch	Institution / University	Year of Passing
Ph.D	Mathematics	Bharathidasan University	2016
M.Phil	Mathematics	Madurai Kamaraj University	2006
B.Ed	Mathematics	Madras University	2000
M.Sc	Mathematics	Bharathidasan University	1998
B.Sc	Mathematics	Bharathidasan University	1996

Ph.D. Details

Title of Thesis	Area of Specialization
Numerical Solutions for the Nth-order Fuzzy Initial Value Problems using Extended Fourth Order Runge - Kutta Methods and Non-linear Trapezoidal method.	Numerical Analysis for Fuzzy Differential Equations
Research Supervisor Dr. V. G. H. Arintha Raj	Research Centre Bishop Heber College, Trichy-17.
	Year of Award October 2016

Cleared NET / SET :	Details	Year of Passing

Additional Qualification

Name of Course	Place of Study	Date	Duration
Diploma in Microsoft Office	CSC, Lalgudi.	2001	6 months
Certificate Course in Latex	Bishop Heber College	2008	3 months
Diploma in Advanced Software Technology	CSC, Lalgudi.	2001	6 months
Refresher Course in applied Mathematics and statistics	Bharathiar University	September 2016	21 Days
Refresher Course in Mathematics and Statistics	Pondicherry University (A Central University)	August 2019	14 days
Short Term Course in Research Methodology	Bharathidasan University, Tiruchirappalli	February 2020	7 days
Orientation course In Mathematics	Bharathidasan University, Tiruchirappalli	November 2009	28 days
Bharathidasan University, Tiruchirappalli	Madurai Kamaraj University, Madurai	February 2012	21 days
Two week online workshop on "Comprehensive e-Learning to e-Training guide for Administrative Work"	Teaching Learning Centre, Ramanujan College, University of Delhi	June 2020	May 25 to June 05, 2020

Work Experience

Name of Institution	Address of Institution	Designation	From	To
Bishop Heber College, Trichy-17.	vayalur Road, Puthur, Trichy-17.	Assistant Professor [Grade-II]	03-07-2002	till now
R. C, Meetpar Higher Secondary School,	K. Ramanathapuram, Lalgudi (T.k), Trichy (D.t)	P. G. Assistant	2000	2001

Teaching / Research Experience

U.G. : 20years **P.G. :** 15years **M.Phil.** 7 years **Ph.D.** 5 years

Research Guidance

U.G. : 14 group **P.G. :** 50 **M.Phil. :** 9 **Ph.D. :** 1 completed, 4

Table of Contents

1.	Conferences / workshops / Seminars Attended	50
2.	Research Papers Presented	7
3.	Publication in Journals	29
4.	Publication in Books	3
5.	Books Published / Edited	2
6.	Conferences / Workshops / Seminars Organised	1
7.	Research Projects	1
8.	Resource Person	6
9.	Consultancy	0
10.	Awards Recieved	0
11.	Patent	0
12.	Extension Activities Undertaken	0
13.	Professional Membership	1
14.	M.Phil. / Ph.D. Produced	7 / 0

1. International level Conference on **"Heber International Conference on Applied Mathematics"** sponsored by PG & Research Department of Mathematics organized by PG & Research Department of Mathematics at Bishop Heber College, Trichy-17 during 26/04/2021 to 01/01/1900.
2. College level Workshop on **"Mathematics in Machine Learning"** sponsored by PG and Research Department of Mathematics organized by PG and Research Department of Mathematics at Bishop Heber College, Trichy-17 during 29/03/2021 to 30/03/2021.
3. International level Conference on **"Virtual Heber International Conference on Applied Mathematics"** sponsored by PG and Research Department of Mathematics organized by PG and Research Department of Mathematics at Bishop Heber College, Trichy-17 during 07/11/2020 to 07/11/2020.
4. College level Workshop on **"E-content Development"** sponsored by Deanery of Academics organized by Deanery of Academics at Bishop Heber College, Trichy-17 during 27/10/2020 to 29/10/2020.
5. International level Seminar on **"Impact on Pandemic on Global Supply Chain?"** sponsored by PG & Research Department of Mathematics and Acturial Science organized by PG & Research Department of Mathematics and Acturial Science at Bishop Heber College, Tiruchirappalli during 10/06/2020 to 10/06/2020.
6. State level Workshop on **"Applications of Differenrial Equations"** sponsored by the Department of Mathematics (UA) organized by the Department of Mathematics (UA) at Kongunadu Arts And Science College (Autonomous), Coimbatore during 04/06/2020 to 04/06/2020.
7. National level Workshop on **"Comprehensive e-Learning to e-Training guide for Administrative Work"** sponsored by Ministry of Human Resource Development Pandit Madan Mohan Malavia National misson on teachers and teaching organized by Teaching Learning Centre, at Ramanujan College, New Delhi during 25/05/2020 to 05/06/2020.
8. State level Seminar on **"Current Research in Fuzzy Mathematics"** sponsored by PG and Research Department of Mathematics organized by PG and Research Department of Mathematics at Sri Pushpam College (Autonomous) Poondi, Thanjavur during 24/05/2020 to 24/05/2020.
9. State level Seminar on **"Current Research in Fuzzy Mathematics"** sponsored by PG and Research Department of Mathematics organized by PG and Research Department of Mathematics at Sri Pushpam College (Autonomous) Poondi, Thanjavur during 24/05/2020 to 24/05/2020.
10. State level Seminar on **"Flipped Classrooms – the way forward!"** sponsored by PG & Research Department of Chemistry organized by PG & Research Department of Chemistry at Bishop Heber College (Autonomous), Trichy during 21/05/2020 to 21/05/2020.
11. State level Seminar on **"Modern Teaching Techniques"** sponsored by Dr. Jahir Husain College& oneyes technologies Chennai organized by Dr. Jahir Husain College& oneyes technologies Chennai at Illayabgudi, Sivagangai district, Tamilnadu, India during 17/05/2020 to 17/05/2020.
12. National level Workshop on **"Basics of Documentation using Latex"** sponsored by the Department of Mathematics, Stella Maris College(Autonomous), organized by the Department of Mathematics, Stella Maris College(Autonomous), at Chennai, Tamil Nadu, India. during 24/04/2020 to 30/04/2020.
13. International level Conference on **"Heber International Conference on Applied Acturial Science, Mathematics, Management and Computer Science"** sponsored by PG & Research Department of Mathematics and Acturial Science organized by PG & Research Department of Mathematics and Acturial Science at Bishop Heber College, Trichy during 09/01/2020 to 10/01/2020.
14. International level Conference on **"International Conference on Application of Basic Sciences ICABS -2019"** sponsored by Bishop Heber College organized by Bishop Heber College at Trichy during 19/11/2019 to 21/11/2019.
15. College level Workshop on **"Science Through Inquiry and Research"** sponsored by UBCHEA organized by PG & Research Department of Chemistry, at Bishop Heber College, Trichy during 17/10/2019 to 18/10/2019.

16. National level Refresher on **"Refresher Course in Mathematics and Statistics"** sponsored by UGC organized by Pondicherry University (A Central University) at Pondicherry during 01/08/2019 to 14/08/2019.
17. International level Workshop on **"1st BOHI INTERNATIONAL POST CONFERENCE WORKSHOP ON"** sponsored by Department of english, Faculty of Modern Languages and communication, UNIVERSITY PUTRA MALAYSIA(UPM), Malaysia organized by Department of english, Faculty of Modern Languages and communication, UNIVERSITY PUTRA MALAYSIA(UPM), Malaysia at UNIVERSITY PUTRA MALAYSIA(UPM), Malaysia during 27/08/2018 to 01/01/1900.
18. International level Conference on **"1st Bodhi International Conference on Humanities, Arts and Science"** sponsored by Department of english, Faculty of Modern Languages and communication, UNIVERSITY PUTRA MALAYSIA(UPM), Malaysia organized by Department of english, Faculty of Modern Languages and communication, UNIVERSITY PUTRA MALAYSIA(UPM), Malaysia at UNIVERSITY PUTRA MALAYSIA(UPM), Malaysia during 24/08/2018 to 27/08/2018.
19. College level Workshop on **"One day workshop on Examinations and Evaluation Reforms"** sponsored by Internal Quality Assurance Cell (IQAC) organized by Internal Quality Assurance Cell (IQAC) at Bishop Heber College, Trichy during 10/03/2018 to 10/03/2018.
20. National level Conference on **"Emerging trends in Mathematics and Mathematics Education"** sponsored by NBHM organized by Department of Mathematics, Maris stella College at Vijayawada, Andra Pradesh during 17/02/2017 to 18/02/2017.
21. College level Workshop on **"Curriculum Design and Evaluation Techniques"** sponsored by DBT organized by Bishop Heber College at Tiruchirappalli during 21/11/2016 to 01/01/1900.
22. International level Conference on **"Heber International Conference on Applications of Actuarial Science, Mathematics, Management and Computer Science"** sponsored by PG Department of Actuarial Science, Bishop Heber college organized by PG Department of Actuarial Science, Bishop Heber college at Tiruchirappalli during 28/10/2016 to 30/10/2016.
23. College level Workshop on **"curriculum design and evaluation techniques"** sponsored by Bishop Heber College organized by Bishop Heber College at Tiruchirappalli during 21/10/2016 to 22/10/2016.
24. -1 level Refresher on **"Refresher Course in Applied Mathematics and Statistics"** sponsored by UGC organized by Human Resource Centre Bharathiar University at Combatore. during 15/09/2016 to 05/10/2016.
25. College level Workshop on **"Effectively Imparting Moral Value on Students"** sponsored by Bishop Heber College organized by Bishop Heber College at Tiruchirappalli during 25/07/2016 to 01/01/1900.
26. -1 level Workshop on **"Effectively Imparting Moral Values on Students"** sponsored by Religious Life Committee, Bishop Heber College organized by Religious Life Committee, Bishop Heber College at Tiruchirappalli during 25/07/2016 to 25/07/2016.
27. -1 level Workshop on **"Faculty Development Programme"** sponsored by Internal Quality Assurance Cell(IQAC), Bishop Heber College organized by Internal Quality Assurance Cell(IQAC), Bishop Heber College at Tiruchirappalli during 27/10/2015 to 27/10/2015.
28. National level Workshop on **"R programming"** sponsored by aegis of UGC Autonomous grant organized by the ABEL Interdisciplinary Research and Extension Activity cell, PG and Research Department of Mathematics, Nehru Memorial College at Tiruchirappalli during 25/09/2015 to 26/09/2015.
29. -1 level Workshop on **"Optimizing Research tools and techniques"** sponsored by PG and Research Department of Library and Information Science and Research & Development Cell, Bishop Heber College organized by PG and Research Department of Library and Information Science and Research & Development Cell, Bishop Heber College at Tiruchirappalli during 22/08/2015 to 22/08/2015.
30. National level Conference on **"National conference on recent trends in analysis and applied mathematics"** sponsored by National Institute of Technology organized by National Institute of Technology at Tiruchirappalli during 09/05/2013 to 10/05/2013.

31. National level Orientation on **"Orientation programme on research activities in science for college teachers"** sponsored by Tamil Nadu state council for science and technology organized by Bharathidasan University at Tiruchirappalli during 24/03/2012 to 25/03/2012.
32. -1 level Refresher on **"Refresher Course in Mathematics on Advance analysis and its applications"** sponsored by UGC organized by Academic Staff College, Madurai Kamaraj University at Madurai during 07/02/2012 to 27/02/2012.
33. National level Workshop on **"Capacity Building of Women Managers in Higher Education Sensitivity/Awareness/Motivation Workshop"** sponsored by UGC organized by the department of Social Work, Bharathidasan University at Tiruchirappalli during 17/01/2012 to 21/01/2012.
34. -1 level Conference on **"Heber International Conference on Applications of Mathematics and Statistics (HICAMS)"** sponsored by the Department of Mathematics, Bishop Heber College organized by the Department of Mathematics, Bishop Heber College at Tiruchirappalli during 05/01/2012 to 07/01/2012.
35. College level Workshop on **"Examination Reforms and Evaluation"** sponsored by Internal Quality Assurance Cell(IQAC),Bishop Heber College organized by Internal Quality Assurance Cell(IQAC),Bishop Heber College at Tiruchirappalli during 18/03/2011 to 19/03/2011.
36. International level Conference on **"Mathematical Methods and Computation"** sponsored by UGC organized by the Department of Mathematics, Jamal Mohamed College at Tiruchirappalli during 24/07/2009 to 25/07/2009.
37. -1 level Workshop on **"Stochastic Differential Equations"** sponsored by UGC organized by the Department of Mathematics, Bishop Heber College at Tiruchirappalli during 23/01/2009 to 24/01/2009.
38. -1 level Workshop on **"Environmental Laws"** sponsored by department of Environmental Sciences, Bishop Heber College, organized by department of Environmental Sciences, Bishop Heber College, at Tiruchirappalli during 27/02/2008 to 27/02/2008.
39. -1 level Workshop on **"Training on MATLAB"** sponsored by UGC organized by the Department of Mathematics, Bishop Heber College at Tiruchirappalli during 22/02/2008 to 22/02/2008.
40. -1 level Workshop on **"Introduction to Simulating Complex Predictive System and Bayesian Modeling in Image Processing"** sponsored by TEQIP Community Services organized by Department of Mathematics, National Institute of Technology at Tiruchirappalli during 25/01/2008 to 25/01/2008.
41. -1 level Workshop on **"Faculty Development Programme Training on MATLAB"** sponsored by UGC organized by the Department of Mathematics and the Internal Quality Assurance Cell, Bishop Heber College at Tiruchirappalli during 25/10/2007 to 26/10/2007.
42. -1 level Workshop on **"Power Point Presentation and Internet usage setting"** sponsored by UGC organized by Bishop Heber College at Tiruchirappalli during 23/04/2007 to 24/04/2007.
43. -1 level Workshop on **"Exam reforms in Question paper setting"** sponsored by Bishop Heber College organized by Bishop Heber College at Tiruchirappalli during 07/03/2007 to 08/03/2007.
44. -1 level Workshop on **"maternity protection benefits in Tamil Nadu"** sponsored by All India Christian Higher Education organized by Bishop Heber College at Tiruchirappalli during 01/03/2007 to 01/03/2007.
45. -1 level Workshop on **"Curriculum Development and Evaluation"** sponsored by UGC organized by Academic Staff College, Bharathidasan University at Bishop Heber College, Tiruchirappalli during 09/03/2006 to 11/03/2006.
46. State level Seminar on **"Mathematical Methods and Fuzzy Applications (SSOMMFA)"** sponsored by UGC organized by the Department of Mathematics, Jamal Mohamed College at Tiruchirappalli during 27/02/2006 to 27/02/2006.
47. National level Conference on **"Brain Storming sessions on product graphs and their applications"** sponsored by organized by at during 21/02/2005 to 22/02/2005.

48. -1 level Orientation on "**17. Two Day Orientation Programme for young lecturers**" sponsored by Bishop Heber College organized by Bishop Heber College at Tiruchirappalli during 24/09/2004 to 25/09/2004.
49. -1 level Orientation on "**Orientation course In Mathematics**" sponsored by organized by at during 01/01/1900 to 01/01/1900.

Research Papers Presented

- 7

1. **"MODIFIED THIRD ORDER RUNGE KUTTA METHOD BASED ON ROOT MEAN SQUARE FOR FUZZY INITIAL VALUE PROBLEMS & HYBRID FUZZY INITIAL VALUE PROBLEMS"** in the International conference on *1ST BODHI INTERNATIONAL CONFERENCE ON HUMINITIES, ARTS AND SCIENCE* sponsored by , organized by Department of English, Faculty of Modern Languages and communication UNIVERSITY PUTRA MALAYSIA(UPM) at Malaysia during 24/08/2018 to 27/08/2018.
2. **"Fourth order Runge-Kutta Method based on Centroidal Mean for fuzzy initial value problems and Hybrid fuzzy initial value problems"** in the National conference on *Emerging Trends in Mathematics and Mathematics Education* sponsored by National Board for Higher Mathematics (NBHM), organized by Maris Stella College at Vijayawada, Andhra Pradesh during 17/02/2017 to 18/02/2017.
3. **"Fourth Order Runge-Kutta Method Based on Centroidal Mean for Fuzzy Initial Value Problems and Hybrid Fuzzy Initial Value Problems in the NBHM"** in the National conference on *Emerging Trends in Mathematics and Mathematics Education* sponsored by , organized by Maris Stella College, Vijayawada at Andhra Pradesh during 17/02/2017 to 18/02/2017.
4. **"Fifth order Runge-Kutta Method Based On Harmonic Mean and Heronian Mean for the first order Fuzzy Initial Value Problems with Triangular, Trapezoidal Parallelogram Fuzzy Number"** in the International conference on *Heber International Conference on Applications of Actuarial Science, Mathematics and Computer Science* sponsored by , organized by PG Department of Actuarial Science, Bishop Heber College at Tiruchirappalli during 28/11/2016 to 30/11/2016.
5. **"Fifth order Runge-Kutta formula based on Harmonic Mean and Heronian Mean for the first order fuzzy initial value problems with Triangular, Trapezoidal, and Parallelogram fuzzy numbers"** in the International conference on *Heber International conference on Applications of Actuarial Science, Mathematics, Management and Computer science* sponsored by , organized by PG Department of Actuarial Science at Bishop Heber College, Tiruchirappalli during 28/10/2016 to 30/10/2016.
6. **"Numerical Solution of initial value problems by fourth order Runge-Kutta method based on geometric mean and root mean square"** in the National conference on *National conference on recent trends in analysis and applied mathematics* sponsored by , organized by Department of Mathematics at NIT, Trichy during 09/05/2014 to 10/05/2014.
7. **"A Comparison of non-linear trapezoidal formulae based on variety of means to solve IVPs."** in the International conference on sponsored by Heber International Conference on Applications of Mathematics and Statistics (HICAMS), organized by Department of Mathematics at Bishop Heber College, Trichy-17 during 05/01/2012 to 07/01/2012.

1. **"Runge-Kutta Method Based on the Linear Combination of Arithmetic Mean, Geometric Mean, and Centroidal Mean: A Numerical Solution for the Hybrid Fuzzy Differential Equation"** published in Indian Journal of Science and Technology (SELECT) Vol. 17, Issue No. 18, April 2024 ISSN : 0974-5645.
2. **"Numerical Solution of Hybrid Fuzzy Differential Equation by using Third Order Runge-Kutta Method Based on Linear Combination of Arithmetic Mean, Root Mean Square and Centroidal Mean"** published in Indian Journal of Science and Technology (SELECT) Vol. 17, Issue No. 14, March 2024 ISSN : 0974-5645.
3. **"Solving Linear and Nonlinear Fuzzy Fractional Volterra-Fredholm Integro Differential Equations Using Shehu Adomian Decomposition Method"** published in Indian Journal of Science and Technology (PEER REVIEW) Vol. 17, Issue No. 12, March 2024 ISSN : 0974-5645.
4. **"Numerical solution for fuzzy fractional differential equations using fuzzy fractional fourth order Runge-Kutta method based on root mean square and contraharmonic mean"** published in Ratio Mathematics (PEER REVIEW) Vol. 49, Issue No. , December 2023 ISSN : 2282-8214.
5. **"Solving fuzzy fractional heat equation using homotopy perturbation Sumudu transform method"** published in International Journal of Information Technology, Research and Applications (PEER REVIEW) Vol. 2, Issue No. 4, December 2023 ISSN : 2583 5343.
6. **"Solving Fuzzy Fractional Biological Population Model using Shehu Adomian Decomposition Method"** published in Indian Journal of Science and Technology (PEER REVIEW) Vol. 16, Issue No. SP3, April 2023 ISSN : 0974-5645.
7. **"Modified Third Order Runge-Kutta Method based on Heronian Mean for Fuzzy Initial Value Problems and Hybrid Fuzzy Initial Value Problems"** published in Journal of Xidian University (PEER REVIEW) Vol. 15, Issue No. 1, January 2021 ISSN : 1001-2400.
8. **"Shehu Transform Method for Linear Fuzzy Fractional Sifferential Equations"** published in Compliance Engineering Journal (PEER REVIEW) Vol. 12, Issue No. 1, January 2021 ISSN : 0898-3577.
9. **"Numerical Solution of Nonlinear Time Fractional Partial Differential Equations Using Mahgoub Transform Iterative Method"** published in The international Journal of Analytical and Experimental Modal Analysis (PEER REVIEW) Vol. XII, Issue No. VII, July 2020 ISSN : 0886-9367.
10. **"2. Mahgoub Transform of fractional derivatives and its applications to fractional differential equations"** published in Compliance Engineering Journal, (PEER REVIEW) Vol. 10, Issue No. (7), July 2020 ISSN : 0898-3577.
11. **"1. Numerical Solution of Fractional RC and RL Electrical Circuits by Fractional Runge-Kutta Method"** published in Journal of Xidian University (PEER REVIEW) Vol. 14, Issue No. 3, March 2020 ISSN : 1001-2400.

Impact factor , Scopus Index 5.4, h - index , Citation index

12. **"Numerical Solution of Fractional RC and RL Electrical Circuits by Fractional Runge Kutta Method"** published in Journal of Xidian University (PEER REVIEW) Vol. 14, Issue No. 3, March 2020 ISSN : 1001-2400.
13. **"1. Numerical Solution of Nonlinear Time Fractional Partial Differential Equations using Mahgoub Transform Iterative Method"** published in The International Journal of Analytical and Experimental Modal Analysis (PEER REVIEW) Vol. 12, Issue No. (7), January 2020 ISSN : ---.
14. **"2. Mahgoub Transform of fractional derivatives and its applications to fractional differential equations"** published in Compliance Engineering Journal, (PEER REVIEW) Vol. 10, Issue No. (7), July 2019 ISSN : 0898-3577.
15. **"MODIFIED THIRD ORDER RUNGE KUTTA METHOD BASED ON ROOT MEAN SQUARE FOR FUZZY INITIAL VALUE PROBLEMS AND HYBRID FUZZY INITIAL VALUE PROBLEMS"** published in International Journal of Research in Humanities, Arts and Science (E-JOURNAL) Vol. 3, Issue No. 11, November 2018 ISSN : 2456-5571.
16. **"Fourth Order Runge-Kutta Method Based On Geometric Mean for Hybrid Fuzzy Initial Value Problems"** published in IOSR Journal of Mathematics (PEER REVIEW) Vol. 13, Issue No. 2, April 2017 ISSN : 2278-5728.
17. **"Numerical solution of Fifth order Runge-Kutta formula based on Contra - Harmonic Mean for the first order Fuzzy Initial Value Problems"** published in PARIPEX - INDIAN JOURNAL OF RESEARCH (PEER REVIEW) Vol. 6, Issue No. 1, January 2017 ISSN : 2250-1991.
18. **"Numerical Solution of Fifth order Runge - Kutta formula based on Contra-Harmonic Mean for the first order Fuzzy initial value problems"** published in Paripex- Indian Journal of Research (PEER REVIEW) Vol. 6, Issue No. 1, January 2017 ISSN : 2250 -1991.
19. **"Numerical solution of Nth-Order Fuzzy Initial Value Problems by Non-Linear Trapezoidal Method based on Logarithmic Mean with Step Size Control"** published in International Journal of Applied Mathematics and Statistical Sciences (IJAMSS) (PEER REVIEW) Vol. 3, Issue No. 3, January 2014 ISSN : 2319-3972.
20. **"Numerical solution of Nth - Order Fuzzy Initial Value Problems by Fourth Order Runge-Kutta Method based On Contraharmonic Mean"** published in International Journal on Recent and Innovation Trends in Computing and Communication (PEER REVIEW) Vol. 2, Issue No. 8, January 2014 ISSN : 2321-8169.
21. **"Numerical Solution of First-Order Fuzzy Initial Value Problem by Non-Linear Trapezoidal Formulae Based on Variety of Means"** published in Paripex- Indian Journal of Research (PEER REVIEW) Vol. 3, Issue No. 5, January 2014 ISSN : 2279 – 0837.
22. **"Numerical Solution of Initial Value Problems by Fourth Order Runge-Kutta Method based on Geometric Mean and Root Mean Square"** published in Recent trends in analysis and applied mathematic (CONFERENCE PROCEEDING) Vol. , Issue No. , January 2013 ISSN : ---.
23. **"Numerical Solution of Fuzzy Initial Value Problems by Fourth Order Runge – Kutta Method based on Contraharmonic Mean"** published in Indian Journal of Applied Research (SELECT) Vol. 3, Issue No. 4, January 2013 ISSN : 2249 - 555X.

24. **"Numerical Solution of Initial Value Problems by Fourth Order Runge-Kutta Method based on Harmonic Mean and Heronian Mean"** published in International Journal of Mathematical Sciences And Engineering Applications (IJMSEA (PEER REVIEW) Vol. , Issue No. , January 2013 ISSN : 0973 - 29424.
25. **"Numerical Solution of Nth- order fuzzy initial value problems by fourth order Runge-Kutta method based on Centroidal Mean"** published in International Organization of Scientific Research (IOSR) (PEER REVIEW) Vol. 6, Issue No. 3, January 2013 ISSN : 2319-2765x.
26. **"Third order weighted Runge Kutta methods based on centroidal mean and contraharmonic mean for solving fuzzy initial value problems"** published in Jamal Academic Research Journal: an Interdisciplinary (PEER REVIEW) Vol. 6, Issue No. 1, January 2012 ISSN : ---.
27. **"Implementation of a new third order weighted Runge-Kutta formula based on centroidal mean for solving stiff initial value problems"** published in Recent Research in Science and Technology (PEER REVIEW) Vol. 3, Issue No. 10, January 2011 ISSN : 2076-5061.
28. **"1. Numerical Solution of Nonlinear Time Fractional Partial Differential Equations using Mahgoub Transform Iterative Method"** published in The International Journal of Analytical and Experimental Modal Analysis (PEER REVIEW) Vol. , Issue No. , January 1900 ISSN : ---.
29. **"A Third Order Runge-Kutta Method Based on Linear Combination of Arithmetic Mean, Harmonic Mean and Heronian Mean for Hybrid Fuzzy Differential Equation"** published in Compliance Engineering Journal (PEER REVIEW) Vol. 12, Issue No. 2, January 1900 ISSN : 0898-3577.

Publication in Books - 3

1. **A comparison of non-linear trapezoidal formulae based on variety of means to solve IVPs.** *Applications of Mathematics and Statistics (HICAMS)*. New Delhi :Excel India Pulication, January 2012.
2. **Fifth order Runge - Kutta formula based on Harmonic Mean and Heronian Mean for the first order Fuzzy Initial value problem with Triangular, Trapezoidal Parrallogram fuzzy numbers.** *Applications of Actural Science, Mathematics, Management and Computer Science.* :, January 1900.
3. **Fourth Order Runge-Kutta Method Based on Centroidal Mean for Fuzzy Initial Value Problems and Hybrid Fuzzy Initial Value Problems in the NBHM.** *Heber International Conference on Applications of Actuarial Science, Mathematics and Computer Science.* Tiruchirappalli :Bishop Heber College, January 1900.

Books Published / Edited - 2

- * **RECENT TRENDS IN APPLIED MATHEMATICS.** Tiruchirappalli : Bishop Heber College , March 2018.
- * **Advancement of Women in Science and Technology.** Bishop HeberCollege (Autonomous), Tiruchirappalli – 620 017 : , January 1900.

Conferences / Workshops / Seminars Organised

- 1

1. National level Conference Entitled **"RECENT TRENDS IN APPLIED MATHEMATICS"** at Bishop Heber College, sponsored by Management and Self-Generated Fund, during 02/03/2018 to 03/03/2018.

RESEARCH PROJECTS

- 1

1. Minor project entitled **"RUNGE-KUTTA METHOD BASED ON VARIETY OF MEANS FOR FUZZY AND HYBRID FUZZY INITIAL VALUE PROBLEMS"** (PRINCIPAL INVESTIGATOR), Sponsored by UGC, during 01/01/2015 to Till Date [Ongoing].

PROFESSIONAL MEMBERSHIP

- 1

- * 2990719272 of American Mathematical Society during 01/01/2019 - 12/31/2019

RESOURCE PERSON

- 6

1. State level Mathematics Club Inauguration on **"Mathematics in real life application"** at Kongunadu College of Education, Thottiam, 22/12/2022.
2. International level Conference on **"Reviewer in 3rd Symposium on IT and Applied Mathematics"** at Oman, 24/05/2022.
3. International level Conference on **"Heber International Conference on Application of Actuarial Science, Mathematics, Management and Computer Science."** at Bishop Heber College, Tiruchirappalli, 07/01/2019.
- 4.
5. International level Conference on **"Chair person in the Heber International Conference on Applications of Actuarial Science, Mathematics and Computer Science"** at Bishop Heber College, 29/11/2016.



Signature of Staff
(R.GETHSI SHARMILA)