<p style="text-align:center">Curriculum Vitae</p>

Dr. Sreenivasulu Ballem
Assistant Professor
Department of Mathematics
Central University of Karnataka
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Career Objective

To work hard with full dedication for the achievement of organization objective, and to use my educational background and skills to impart knowledge to learners by using modern and traditional approaches to develop the learner's skills.

Education:

- Ph.D. in Mathematics (2011-14), National Institute of Technology Warangal, Telangana State, India.
- M.Phil. in Mathematics (2006-07), Pondicherry University, Puducherry, India.
- M.Sc. in Mathematics (2004-06), University of Hyderabad, Telangana State, India.
- B.Sc. (Mathematics, Statistics and Computer Science) (2001-04), NBKR Science &Arts College affiliated to Sri Venkatewsara University, Tirupati, Andhra Pradesh, India.

Awards/Honor/ achievements:

- GATE qualified in 2011, 2016, 2017.
- Faculty Eligible Test qualified in 2010 which was conducted by JNTU-Hyderabad.
- Secured 5th rank in 2006, M.Phil. entrance of Pondicherry University.
- Best paper award in 2016, National conference held in NIT Warangal.
- Received JRF& SRF fellowship from MHRD during research period in NIT Warangal.

Research Interests:

- Finite Difference Methods
- Finite Element Method
- Numerical Analysis

Teaching Experience:

- Working as Assistant Professor of Mathematics in CUK-Kalaburagi, Karnataka (March, 2018 to till date).
- Worked as Assistant Professor of Mathematics in GMRIT-Rajam, Andhra Pradesh (December, 2017 to February 2018).
- Worked as an Adjunct Assistant Professor of Practice in the Department of Mathematics, VNIT Nagpur, Maharashtra (July 2017 to December 2017).
- Worked as an Adhoc faculty in the Department of Mathematics, NIT Warangal, Telangana State (2014 - 2017).
- Worked as an Assistant Professor of Mathematics for a period of 03 years in Vardhaman College of Engineering, Shamshabad, Telangana State (2008 - 2011).
- Worked as Guest faculty in Mathematics for a period of 01 years in Pondicherry University, Puducherry (2007 - 2008).
- Teaching assistant in NIT Warangal during research period.

Papers Published/Accepted

1. K.N.S. Kasi Viswandham, Sreenivasulu Ballem, "Numerical solution of fourth order boundary value problems by Galerkin method with cubic B-splines", *International Journal of Engineering Science and Innovative Technology*, Vol.2(3), pp: 41-53, 2013.
2. K.N.S. Kasi Viswandham, **Sreenivasulu Ballem**,"Numerical solution of fifth order boundary value problems by Galerkin method with quartic B-splines", *International Journal of Computer Applications*, Vol. 77(17), pp:7-12, 2013.
3. K.N.S. Kasi Viswandham, **Sreenivasulu Ballem**,"Numerical solution of sixth order boundary value problems by Galerkin method with quintic B-splines", *International Journal for Mathematical Sciences and Engineering Applications*, Vol. 8(2), pp:371- 385, 2014.

4. K.N.S. Kasi Viswandham, **Sreenivasulu Ballem**,"Numerical solution of eighth order boundary value problems by Galerkin method with quintic B-splines", *International Journal of Computer Applications*, Vol. 89(15), pp:7-13, 2014.

5. K.N.S. Kasi Viswandham, **Sreenivasulu Ballem**, "Numerical solution of tenth order boundary value problems by Galerkin method with quintic B-splines", *International Journal of Innovation in Science and Mathematics*, Vol. 2(3), pp:288-294, 2014.

6. K.N.S. Kasi Viswandham, **Sreenivasulu Ballem**, "Numerical solution of tenth order boundary value problems by Galerkin method with sextic B-splines", *International Journal of Applied Mathematics and Statistical Sciences*, Vol. 3(3), pp:17-30, 2014.

7. K.N.S. Kasi Viswandham, **Sreenivasulu Ballem**, "Numerical solution of tenth order boundary value problems by Galerkin method with septic B-splines", *International Journal of Applied Science and Engineering*, Vol. 13(3), pp:247-260, 2015.

8. **Sreenivasulu Ballem**,K.N.S. Kasi Viswandham, "Numerical solution of eighth order boundary value problems by Galerkin method with septic B-splines", *Procedia Engineering*, Vol. 127, pp:1370-1377, 2015.

9. **Sreenivasulu Ballem**, K.N.S. Kasi Viswandham, "Numerical solution of sixth order boundary value problems by Galerkin method with quartic B-splines", *Lecture Notes in Mechanical Engineering*, pp:505-511,2019.

10. **Sreenivasulu Ballem**, " Galerkin Method for solving twelfth order BVP's", *International Journal of Advanced Trends in Computer Applications*, Vol 1(1), pp:60-65,2019.

11. **Sreenivasulu Ballem**, Maddileti Pasupula, M. Sivaiah, "Numerical solution of twelfth order boundary value problems by Galerkin method with septic B-splines", *Journal of Critical Reviews,* Vol. 7(5), pp: 2226-2231, 2020.

12. **Sreenivasulu Ballem**,"Numerical solution of fifth order boundary value problems by Galerkin method with cubic B-splines", *South East Asian Journal of Mathematics and Mathematical Sciences*, Vol. 16(1), pp:89-96, 2020.

13. **Sreenivasulu Ballem**, "Numerical solution of Eleventh order boundary value problems by Galerkin method with sextic B-splines", *Advances in Mathematics: Scientific Journal,* Vol. 9(10), pp: 7749-7755, 2020.

14. **Sreenivasulu Ballem,** Ramalingaiah Kadari, "Numerical solution of Eleventh order boundary value problems by Galerkin method with septic B-splines", *Journal of Critical Reviews,* Vol. 7(5), pp: 2213-2218, 2020.

15. Hussain Basha, Naresh Kumar Nedunuri, Gudala Janardhana Reddy, **Sreenivasulu Ballem**, "Thermal analysis of buoyancy-motivated Casson fluid flow with time-independent chemical reaction under Lorentz forces", *Heat Transfer—Asian Research*, Vol 44(2),pp:1-30, 2021.

16. Hussain Basha, **Sreenivasulu Ballem**, G. Janardhana Reddy, Harish Holla, Mikhail A. Sheremet, Buoyancy-motivated dissipative free convection flow of Walters-B fluid along a stretching sheet under the Soret effect and Lorentz force influence,Heat Transfer, 2022, 51(4), pp:1-28, DOI: 10.1002/htj.22461, (IF:0.5).

List of Papers Presented

1. "Numerical solution of fourth order boundary value by Galerkin method with cubic B-splines" in national conference on the *XXI Congress of Andhra Pradesh Society for Mathematical Sciences (APSMS)*, organized by the Department of Mathematics, Sri Venkateshwara University, Tirupati during 7 - 9 December, 2012.

2. "Numerical solution of fourth order boundary value by Galerkin method with cubic B-splines" in 57th *Congress of ISTAM (An International Meet)*, organized by the Department of Applied Mathematics, DIAT Pune during 17 - 20 December, 2012.

3. "Numerical solution of sixth order boundary value by Galerkin method with quartic B-splines" in 58th *congress of ISTAM (An International Meet)*, organized by the Department of Aerospace Engineering & Applied Mechanics, BESU, Howrah, West Bengal during 18 - 21 December, 2013.

4. "Numerical solution of fifth Order boundary value by Galerkin method with quartic B- splines" in the National conference on Recent Advances in Numerical Methods and Its Applications, organized by the Department of Mathematics, Pondicherry University, Puducherry, during 26 - 27, January, 2014.

5. "Numerical solution of tenth order boundary value by Galerkin method with septic B- splines" in 59th *congress of ISTAM (An International Meet)*, organized by the Alliance University, Banglore, during 18 - 21 December, 2014.

6. "Numerical solution of eighth order boundary value by Galerkin method with septic B-splines" in *International Conference on Computational Heat and Mass Transfer* , organized by the Department of

Mathematics, NIT-Warangal, during Nov 30- Dec 2, 2015.

7. "Numerical solution of fifth order boundary value by Galerkin method with cubic B- splines" in *National Conference on Applied Nonlinear Dynamics* , organized by the Department of Mathematics, NIT-Warangal, during Dec 21-22, 2016.

8. "Numerical solution of sixth order boundary value by Galerkin method with quartic B-splines" in *International Conference on Numerical Heat Transfer and Fluid Flow* , organized by the Department of Mathematics, NIT-Warangal, during January 19-21, 2018.

9. "Galerkin method for solving twelfth order BVP's" in National Conference on Computational Modelling of Fluid Dynamics Problems, organized by the Department of Mathematics, NIT-Warangal, during January 18-20, 2019.

10. "Numerical solution of second order singular boundary value problems by Galerkin method with quadratic B-splines" in *2nd International Conference on Numerical Heat Transfer and Fluid Flow*, organized by the Department of Mathematics, NIT-Warangal, during January 17-19, 2020.

Conferences / Workshops / STTPs Attended

1. A National conference on *Mathematical Modeling and Simulation* at XX Congress of Andhra Pradesh Society for Mathematical Science (APSMS), December 09-11, 2011, SBIT, Khammam.

2. A National conference on *New Vistas in Computational Fluid Dynamics in Engineering*, organized by the Department of Mathematics, NIT Warangal during 27 -29 January, 2012.

3. A National workshop on *Recent Trends in Partial Differential Equations and Applications*, March 18-19, 2012, University of Hyderabad, Hyderabad

4. A one day National workshop on *Applications of Mathematics in Computers & Engineering Field*, organized by the Department of Basic Sciences & Humanities, Vaagdevi College of Engineering, Bollikunta, Warangal on 23rd July, 2013.

5. A one day National workshop on *Good Laboratory Practices*, 13th September, 2013, NIT Warangal, Warangal.

6. A workshop on *Scientific Computing with MATLAB*, organized by Mechanical Engineering Department, NIT Warangal during 22 - 26 September, 2013.

7. A National workshop on *Advances in Computational Fluid Dynamics: Methods and Applications*, organized by Mechanical Engineering Department, NIT Warangal during 17 - 19 October, 2013.

8. A National workshop on *Computational Methods in Engineering & Science*, organized by the Department of Mathematics, NIT Warangal, during 21 - 25 October, 2013.

9. A National workshop on *Mathematical Modeling in Engineering*, organized by the Department of Mathematics, NIT Warangal, during 2 - 6 December, 2013.

10. A National workshop on *Mathematical Foundation of Advanced Finite Element Methods*, organized by the Department of Mathematics, BITS- Goa, during 26th December 2013 to 3rd January 2014.

11. Short Term Training Programme on *Advanced Computational Methods in Engineering and Science*, organized by the Department of Mathematics, NIT-Warangal, during 1-3 April, 2015.

12. Short Term Training Programme on *Advanced Numerical Methods in Fluid Dynamics*, organized by the Department of Mathematics, NIT-Warangal, during 17-20 April, 2015.

13. Summer School on *Matrix Methods and Fractional Calculus*, organized by the Centre for Mathematical and Statistical Sciences, Peechi(KFRI), Kerala during 15th June to 10th July, 2015.

14. Short Term Training Programme on Mathematical Modeling and Computational Techniques, organized by the Department of Mathematics, NIT-Warangal, during 7-11 December, 2015.

15. A National Conference on *Women in Higher Education*, organized by the Department of Mathematics, Humanities and Social Sciences, NIT- Warangal, during 30-31 May 2016.

16. A Training Programme on *Instructional Design and Delivery Methods*, organized by Teaching Learning Centre, NIT Warangal, during 12 - 14 November, 2016.

17. A Training Programme on *Instructional Design and Delivery Methods*, organized by Teaching Learning Centre, NIT Warangal, during 22 - 24 December, 2016.

18. Short term training programme on *Mathematical Modelling & Numerical Techniques in Engineering and Science*, NIT Warangal, during 9-13 October, 2018.

19. Short term training programme on *Numerical and Symbolic Computing*, NIT- Warangal, during 27th -31st May, 2019.

20. Advanced Workshop on *Partial Differential Equations & Applications*, Central University of Kerala-Kasaragod, during 16th-30th December, 2019.

21. Online trainng program on "*Introduction to SageMath*",Institute of Chemical Technology, Mumbai, during May20-June 29,2021 Six weeks course(two sessions per week).

Conferences / Workshops / STTPs Conducted
- National Workshop on Current Research in Mathematical Sciences (CRMS-2019), during March 28-30, 2019 (co-convener).
- International e-conference on Number Theory and Differential Equations (ICND-2021), during December 21-24, 2021(Convener).
- International E-Seminar on advances in Mathematical Sciences (ISAMS-2022), during March 14-16 (Convener).
- International Seminar on Indian Mathematicians and their Contributions (ISIMS-2022), during December 21-22, 2022 (Convener).

Projects
- Singular Boundary value Problems by Galerkin Method with different orders of B-spline funded by Central University Karnataka.

Membership of Professional Bodies
- Life member of *Andhra Pradesh and Telangana Society for Mathematical Sciences (APTSMS), Osmania University, Hyderabad, T.S.*
- Life member of *Indian Society of Theoretical and Applied Mechanics (ISTAM), IIT Kharagpur, W.B., INDIA.*
- Life member of *Indian Mathematical Society (ISM), Pune, Maharashtra, INDIA.*

Strengths
- Eager to learn and flexible to work in a team as well as individual with never say die attitude.
- Hard working, self-motivated and positive nature.

Competence in Computer Applications
- MS Office.
- FORTRAN, C, C++.
- MATLAB, LaTeX.