

CURRICULUM VITAE

Dr. Bhausheb R. Sontakke

M.Sc. M.Phil. Ph.D.

Professor and Head,

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➤ Educational Qualifications:

Degree	Year of Passing	University	Percentage	Division
Ph. D.	2009	Dr. Babasaheb Ambedkar Marathwada University Aurangabad	--	Awarded
M.Phil.	2002	Dr. Babasaheb Ambedkar Marathwada University Aurangabad	67.50	First
M. Sc.	1994	Dr. Babasaheb Ambedkar Marathwada University Aurangabad	60.13	First
B. Sc.	1991	Dr. Babasaheb Ambedkar Marathwada University Aurangabad	65.58	First

- **Doctor of Philosophy (Ph.D. in Mathematics)**

Thesis Title: Studies in Qualitative Theory of Parabolic Differential Equations

- **Master of Philosophy (M.Phil. in Mathematics)**

Thesis Title: Oscillation Theory of Delay Differential Equations

- **Teaching Experience: 26 Years (UG & PG)**

- **Research Interest:** Theory of Differential and Integral Equations, Fractional Differential Equations, Integral Transforms.

➤ **Research Students Completed Ph.D. (08):**

Sr. No.	Name of the student	Topic of Research	Date of Registration	Status
1	Mr. G.L.Rokade	Contribution to the Study of Mathematical Models in Groundwater Resources and Applications	July 2013	Awarded (May 2016)
2	Mr.G.T.Khurpe	Studies on Fractional Parabolic Problems	July 2013	Awarded (Nov.2016)
3	Mrs.V.V.Sangvikar	Some Contribution to the Numerical Methods in Fractional Differential Equations and Applications	July 2013	Awarded (Dec.2016)
4	Mr.G.P. Kamble	Some Generalized Integral Transforms and Applications	July 2013	Awarded Sept. 2017
5	Mr.Amjat Shaikh	Studies on Fractional Differential Equations and Applications	DEC.2014	Awarded April 2018
6	Mr.S.S.Shelke	Some Contribution to Fractional Differential Equations	July 2013	Awarded April 2019
7	Mr.S.B.Kakde	Linear Differential-Algebraic Equations of Higher Order and The Regularity or Singularity of Matrix Transforms	2015	Awarded 2019
8	Mrs.R.B.Pandit	On the Study Fractional Calculus and Applications	June 2016	2021

➤ **Number of Ph.D. Students Ongoing (06):**

➤ **Academic Positions:**

1. **Chairman Board of Studies in Mathematics** of Dr. Babasaheb Ambedkar Marathwada University Aurangabad from June, 2011 to till date.
2. **Member of Academic Council** Dr. Babasaheb Ambedkar Marathwada University Aurangabad from June, 2011 to till date.
3. **Member of Research and Reorganization Committee** of Dr. Babasaheb Ambedkar Marathwada University Aurangabad from June, 2011 to till date.
4. **Member Board of Studies in Mathematics** New Arts Commerce College Ahmednagar from March 2021. (Autonomous College).

➤ **Research Papers Publications in National and International Journals: (53)**

1. **Bhausahab Sontakke and Rushikesh Pakhale (2021)**, Study of Thermal stresses Analysis, Journal of Maharaja Sayajirao University of Baroda, Vol.55, No.1 (V) (2021), 27-34, ISSN 0025-0422.
2. **Bhausahab Sontakke and Rajashri Pandit (2021)**, Numerical Solution of Time Fractional Time Regularized Long Wave Equation by Adomian Decomposition Method and Applications, *Journal of Mechanics of Continua and Mathematical Sciences*, Vol. 16, No.2 (2021), 48-60. ISSN 2454-7190.
3. **Bhausahab Sontakke and Jagdish Sonwane and K.C. Takale (2020)**, Strong and mild solutions of the fractional ordinary differential equation and its applications, *Malaya Journal of Matematic*, Vol. 2 (2020),1-17. ISSN 2321-5666.
4. **Govind Kamble Mohammed Mazhar UI-Haque and Bhausahab Sontakke (2020)**, Lie group investigation of fractional partial differential equation using symmetry' *Malaya Journal of Matematik*, Vol. 8, No. 3(2020), 1243-1247. ISSN 2321-5666.
5. **Mazhar-UI-Haque , Shaikh Waseem and Bhausahab Sontakke (2020)**, Symmetry Analysis of System of Fractional Differential Equation, *Our Heritage*, Vol.68, Special Issue-38,636-642. ISSN: 0474-9030.
6. **Bhausahab Sontakke Amjad Shaikh and Kottakkaran S. Nisar (2019)**, Existence and Uniqueness of integrable solutions of fractional Order IVP equations, *Journal of Mathematical Modelling*, Vol.6 (2) (2019) 137-148, ISSN Online -2382-98.
7. **Bhausahab Sontakke and Rajashri Pandit (2019)**, Convergence Analysis and Approximate Solution of Fractional Differential Equations, *Malaya Journal of Matematik*, Vol .7, No.2 (2019). 338-344. ISSN 2321-5666.
8. **Bhausahab Sontakke and Rajashri Pandit (2019)**, Numerical Solution of Time Fractional Telegraph Fitzhugh- Nagimo Equation *Journal of Emerging Technologies and Innovative Research* Vol. 6, No. 3(2019), ISSN 2349-5612 (IF 5.87).
9. **Bhausahab Sontakke (2019)**, Adomian Decomposition Method for solving Highly Nonlinear Fractional Partial Differential Equations, *IOSR Journal of Engineering*, Vol.9, Issue-3. (2019) 39-44, ISSN 2278-8719.
10. **Bhausahab Sontakke, A.S.Shelke and A.S.Shaikh (2019)**, Solution of Nonlinear Fractional Differential Equations by Variational Iteration Method and Applications, *Far East Journal of Mathematical Sciences* .Vol.110 no.1,(2019) ,113-129. Online ISSN-2394-8426 Scopus UGC Listed 1.34
11. **Bhausahab Sontakke and Amjad Shaikh (2018)**, Approximate solution of a Generalized Hirota Satsuma Coupled Kdv and a coupled mKdv Systems with the time Fractional Derivatives, *Malaysian Journal of Mathematical Sciences*,12(2) (2018), 175-196 ISSN-2394-5303.
12. **Shrikrishna Kakde and Bhausahab Sontakke (2019)**, A Comparative Analysis on Gaussian Isoperimetric Inequality, and its Similar Concentration Trend, *Journal of Advances in Science and Technology*, Vol.15 Issue 2, Sept 2019. ISSN 2230-9859.

13. **G.P. Kamble and B.R,Sontakke (2019)**, Solution of Specific Fractional Differential Equations by Natural Integral Transform, International Journal of Scientific Research in Mathematical and Statistical Sciences, Volume 5, no.6 (2019),40-45, ISSN 2348-4519. IF 1.601.
14. **Bhausahab Sontakke and Abhijeet Shelke (2018)**, Solution of Time Fractional Partial Differential Equations by Variational Iteration Method and Applications, Asian Journal of Mathematics and Computer Research 23(1) (2018) 7-16, ISSN2395-4205.
15. **Mohammad Mazhar, Bhausahab Sontakke and T.L.Holambe (2018)**, Monotone Solution of Cauchy Type Weighted Nonlocal Fractional Differential Equation, International Journal of Advanced Research in Mathematics, Vol.11, (2018), 18-33, ISSN-2297-6213.
16. **Bhausahab Sontakke and Govind Kamble (2017)**, A New Integral Transform Method for Solving fractional differential equations, Far East Journal of Mathematical Sciences.Vol.102 no.17(2017), 2913-2940 Online ISSN-2394-8426 Scopus UGC Listed 1.34
17. **Bhausahab Sontakke,Rushikesh Pakhale and Sachin Salve (2017)**, Thermal Flexural Analysis of Isotropic Plate using New Trigonometric Shear Deformation Theory , International Journal of Recent Research Aspects, Vol. 4, No. 4 (2017),390-401. ISSN-2349-7688.
18. **Bhausahab Sontakke and Amjad Shaikh (2017)**, Fractional Complex Transform for Approximate Solution of Time Fractional Zakharov- Kuznetsov Equation, International Journal of Pure and Applied Mathematics, Vol. 116, No.4 (2017),913-927. ISSN 1311-8080.
19. **Bhausahab Sontakke and Govind Kamble (2017)**, Study of Generalized Integral Transforms their Properties and Relations, Globle Journal of Pure and Applied Mathematics13 (4) (2017),1285-1302. ISSN-22349-76886.
20. **Bhausahab Sontakke and Abhijeet Shelke (2017)**, Numerical Method for Variable-order Space Fractional Diffusion Equation and Applications, Malaya Journal of Matematik, 5(1) (2017) 41–49. ISSN 2319-3786.
21. **Bhausahab Sontakke and Govind Kamble (2017)**, Generalized Multi-Term Fractional Boundary Value Problems Using Integral Transform Technique Journal of Mathematics Research, Vol. 9, No.1(2017) ISSN 1916-9795 (Print) ISSN 1916-9809 (Online).
22. **Bhausahab R. Sontakke and G.T. Khurpe (2016)**, Fractional Order Finite Difference Scheme forTwo Dimensional Space-Time Fractional Diffusion Equation, IOSR Journal of Mathematics12 (2) (2016), 8-16. ISSN-22349-76886.
23. **Bhausahab Sontakke and Abhijeet Shelke (2016)**, Approximate Scheme for Time Fractional Diffusion Equation and its Applications, Global of Journal of Pure and Applied Mathematics 5(1)(2017), 41–49. ISSN-22349-76886.
24. **Bhausahab Sontakke and Amjad Shaikh (2016)**, Approximate solutions of time fractional Kawahara and modified Kawahara equations by Fractional complex transform, Communications in Numerical Analysis 2016 No.2 (2016) 218-229. ISSN 2193-4215.
25. **Bhausahab Sontakke and Amjad Shaikh (2016)**, The New Iterative Method for Approximate Solutions of Time Fractional Kdv, K(2,2), Burgers, and Cubic Boussinesq Equations, Asian Research Journal of Mathematics 1(4): 1-10, 2016,
26. **Bhausahab Sontakke and Amjad Shaikh (2016)**, Solving Time Fractional Sharma –Tasso –

Olever Equation Using Fractional Complex Transform with Iterative Method, British Journal of Mathematics and Computer Science 19(1). Pp 1-10, 2016. ISSN 2231- 0851.

27. **Bhausahab Sontakke and Amjad Shaikh (2016)** Numerical Solution of Time Fractional Fonberg-Whitham and Modified Fonberg-Whitham Equations using New Iterative Method, Asian Journal of Mathematics and Computer Research 13 (2) (2016),66-76. ISSN 2395-4205.
28. **Bhausahab Sontakke and Veena Sangvikar (2016)**, Implicit Numerical Method for Space Fractional Anomalous Diffusion Equation, American Journal of Mathematics and Sciences, Vol. 5, No.1(2016), 57-66. ISSN 2250-3102.
29. **Bhausahab Sontakke and Govind Kamble (2016)**, Some Integral Transform of Generalized Mittag- Leffler Function, International Journal of Pure and Applied Mathematics, Vol. 108, No.2 (2016),327-339. ISSN 1311-8080.
30. **Bhausahab Sontakke and G.T.Khurpe (2016)**, Application of Adomian Decomposition Method for Solving Highly Nonlinear Initial Boundary Value Problems, IJLTEMAS, 5 (3),2278-2540.
31. **Bhausahab Sontakke and Govind Kamble (2016)**, Integral Transform Technique for Coupled Hybrid Systems of Multi -Term Quadratic Fractional Boundary Value Problem, Nonlinear Analysis and Differential Equations, Volume 4, no.1,679-695.
32. **Bhausahab Sontakke and Veena Sangvikar (2016)**, Analysis of Explicit Approximate Solution for Time Space Fractional Soil Moisture Diffusion Equation and Its Application, International Journal of Mathematics and Computer Research, volume 5, Issue 5(2016), 1387-1400. ISSN 2320-7167.
33. **B.R. Sontakke and G. L. Rokade (2015)**, Numerical Solution of 2-D Linearised Boussinesq Equation, Mathematica Aeterna 5 (2) (2015),319-325, ISSN 1314-3344.
34. **B.R. Sontakke and A.S. Shaikh (2015)**, Properties of Caputo Operator and Its Applications to Linear Fractional Differential Equations, International Journal of Engineering Research and Applications 5 (5) (2015), 22-27. ISSN 2248-96227.
35. **G.K.Patil, B. R. Sontakke and J.A.Nanware (2015)**,Use of Softwares and ICT In Teaching and Learning of Mathematics Bulletin of the Marathwada Mathematical Society 14(1) (2015),49-57,ISBN 0976-6049,
36. **B. R. Sontakke and G.L. Rokade (2015)**, Numerical Solution of 2-D Nonlinear Boussinesq Equation. Asian Journal of Mathematics and Computer Research (U.K),7(3) (2015),227-236 ISSN 2395-4205.
37. **B.R. Sontakke and G.L. Rokade (2014)**, Water table fluctuations due to time varying recharge in a 1-d flow system from recharge basin, International Journal of Differential Equations and Applications 13 (2) (2014), 51-59. ISSN 1311-2872
38. **Bhausahab Sontakke (2014)**, Monotone Method for Nonlinear Weakly Coupled Time Degenerate Parabolic System with Nonlinear Boundary Conditions. Journal of Advanced Research in Dynamical and Control System (U.K), Vol 6, Issue 4(2014),1-12, ISSN1943-023X.
39. **N.D.Choudhari B.R. Sontakke and B.R. Sharma (2014)**, Structural and ac susceptibility studies in non-stoichiometric nickel ferrites, International Science Journal 1 (3) (2014),24-30. ISSN 2249-3352.
40. **N.D.Choudhari B.R. Sontakke and B.R. Sharma (2014)**, Electric and Dielectric Behavior in

Non- Stoichiometric Nickel Ferrites, International Journal of Basics And Applied Research, Vol 3, Issue1(2014), 36-39,ISSN2348-3639.

41. **Bhauasaheb R. Sontakke (2013)**, Mathematical Theory of Degenerate Reaction Diffusion Problems, Bulletin of the Marathwada Mathematica Society, 14 (1) (2013), 81-101, ISBN 0976-6049.
42. Dr. M.D. Jahagirdar and **Bhauasaheb Sontakke (2013)**, Professor Dnyanoba Baurao Dhaigude Bulletin of Marathwada Mathematical Society. 14 (1), ISBN 0976-6049.
43. **B.R. Sontakke and A.A. Navlekar (2013)**, on the steady State Thermo elastic Problem for thin Annular Disc, Applications Far East Journal of Mathematical Sciences Vol.76, No.2 (2013),235-243, ISSN 2277-6982.
44. **B.R. Sontakke and J.A. Nanware (2012)**, A Note on Pachpatte's Inequalities, International Journal of Basic and Applied Research 2 (2) (2012), 56-62. ISSN 2249-3352
45. **B.R. Sontakke and A.A. Navlekar(2012)**, Thermal stresses in a thin annular disc, International Journal of Mathematical Engineering and Science 1 (7), 19-26, ISSN 2277-6982
46. **Bhauasaheb Sontakke (2011)**, Survey of oscillation criteria for first order delay differential equations, Bulletin of the Marathwada Mathematical Society, 12 (1), 128-136, ISBN 0976-6049.
47. **A.A. Navlekar, K.P.Ghadle and B.R. Sontakke (2012)**, Study of an Exact Solution of Transient Thermoelastic Problem of Thin Circular Plate in Marchi-Zgrablich Transform Domain, Advances in Theoretical and Applied Mathematics 7 (1)(2012), 25-32, ISSN 0973-4554
48. **G.P.Khetri,V.P.Pawar and B.R. Sontakke (2012)**, Automatic Speech Recognition for Marathi Isolated Words, International Journal of Application or Innovation in Engineering,Vol.1,Issue 3,2319-4847
49. **D.B.Dhaigude and B.R. Sontakke (2011)**,Monotone Technique for Nonlinear Degenerate Weakly Coupled System of Parabolic Problems, Communications in Applied Analysis,15 (1), (2011), 13-24, ISSN 1083-2584.
50. **Bhauasaheb Sontakke and Chandradeepa Dhaigude (2011)**, Monotone Method for Nonlinear Weakly Coupled Degenerate Parabolic System, Recent Advances in Mathematical Sciences and Applications, 258-268, 1ISBN 97881-920783.
51. **Bhauasaheb Sontakke (2011)**, Numerical Solution of Wave Equation by Finite Difference Scheme, Advances in Computational Mathematics, 258-268 (2011), ISBN 978 81-920783-4-2
52. **V.Pawar and Bhauasaheb Sontakke (2011)**, Effect of Need Forward Back Propagation Neural NetworksLayer Between 7th Layer to 10th Layer on the Accuracy in Finger Print Pattern Reorganisation International Journal of Societal Applications Computer Science
53. **Bhauasaheb Sontakke and Amjad Shaikh**, The Golden Ratio and its Application in Architecture, Our Heritage, Special Issue, Feb-2020.

➤ Citations:

- Total Citations: 143
- H-index: 07
- i10-index: 04

➤ **Books Published: (07)**

1. Ganitache Adhapan
2. Mechanics
3. Integral Calculus & Geometry
4. Real Analysis
5. Integral Transforms
6. Ordinary Differential Equations
7. Engineering Mathematics

➤ **Referee for National and International Journal Articles:**

1. Journal of Dynamical and Control Systems
2. Nonlinear Functional Analysis & Applications
3. International Journal of Advanced Intelligence Paradigms
4. International Journal Functional Analysis
5. South Asian Journal of Mathematics
6. *Computers, Materials & Continua*
7. GANITA
8. Asian Research Journal of Mathematics
9. Asian Journal of Mathematics and Computer Research
10. Far East Journal Mathematics
11. Marathwada Mathematical Society
12. Current Journal of Applied Science and Technology
13. The Aligarh Bulletin of Mathematics

➤ **Ph. D. Thesis Referee of Universities:**

- Karnataka University, Dharwad, Karnataka
- Kalinga University Raipur (Uttarakhand)
- Swami Ramanand Marathwada University, Nanded
- Sant Gadge Baba Amravati University, Amravati
- Kavyatri Bahinabai Choudhari North Maharashtra University ,Jalgaon
- Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- Savitribai Phule Pune University, Pune

➤ **Research Projects: (02)**

Sr. No.	Name of Principal Investigator	Title of The Project	Duration	Amount (in Rs)	Funding Agency
1	Dr. Bhausahab Sontakke	Study of Some Hyperbolic Inequalities and Applications	01/04/2013 to 31/03/2015	15000	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad
2	Dr. Bhausahab Sontakke	Study of Some Efficient Methods for Solving Fractional Differential Equation	01/02/2017 to 31/03/2019	30000	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

➤ **Membership of Professional Committees:**

- Life member of the Marathwada Mathematical Society
- Member of Indian Science Congress
- Life member of Indian Mathematical Society (IMS).
- Life member of Godavari Mathematical Society
- Life member of Balghat Mathematical Society
- Member of Teachers Association Society
- Member of The Indian Mathematics Consortium

➤ **Talk Delivered in National and International Conferences:(20)**

1. Participated and delivered talk on **“Recent Developments in the Theory of Fractional Calculus”** in One Day National conference on International e-Conference on Nonlinear Analysis and Applications organized by Department of Mathematics, Dayanand Science College, Latur on July 27-29, 2020.
2. Participated and delivered talk on **“Basic Developments in Fractional Calculus”** in four days international conference on Recent Trends in Mathematics and Applications organized by Department of Mathematics, Yeshwantrao College, Tuljapur on March 11, 2020.
3. Participated and delivered talk on **“Monotone Iterative method for Solution of Reaction Diffusion Problems”** in One day National Conference on Importance of Mathematics Education organized by Department of Mathematics, College, Kille-Dharur on February 04,2020.
4. Participated and delivered talk on **“Recent Developments in Fractional Calculus”** in One day National Conference on Recent Trends in Physics, Chemistry & Mathematics organized by Department of Mathematics, Sundarrao Solunke Mahavidyalaya, Majalgaon on February 08,2020.
5. Participated and delivered talk on **“The Adomian Decomposition Method for Numerical Solution of Differential Equations”** in Three day National Conference on Recent Trends in Mathematics and its Applications organized by Department of Mathematics, Anandrap Dhonde Mahavidyalaya,Kada on January 16-18 ,2020.

6. Participated and delivered talk on **“Fractional Complex Transform for the fractional Sharma – Tasso-Olver Equation using Iterative Method”** in Three-day National Conference on Recent Trends in Mathematics and its Applications organized by Department of Mathematics, Maharaja Sayajirao Gaikwad College Malegaon on Dec 27-29, 2018.
7. Participated and delivered talk on **“On Research Methodology”** in two-day state level Conference on Recent Trends in Mathematics and its Applications organized by Department of Mathematics Hire College Nasik on December 27-29, 2019.
8. Participated and delivered talk on **“Solution of Partial Differential Equations by Variational Iteration Method and its Applications”** in 3rd International Conference on Recent Advances in Mathematical Sciences and Applications organized by Department of Mathematics Gyatri Vidya Prasad College of Engineering Vishakapatnam held during December 19-22, 2017.
9. Participated and delivered talk on **“Mathematical Theory of Time Degenerate Reaction Diffusion Equations”** in National Conference on Advances in Physical and Mathematical Sciences organized Govt. First Grade College Afzalpur Karnataka. March 26-27 2018.
10. Participated and delivered talk on **“Mathematical Theory of Time Degenerate Reaction Diffusion Equations”** in National Conference on National Conference on Pure and Applied Mathematics organized by Yogeshwari Mahavidyalaya, Ambejogai on January 11-13, 2018.
11. Participated and delivered talk on **“Use of Software’s for teaching Mathematics”** on One Day Workshop on B.Sc. Syllabus of S.R.T. M.U. Nanded organized by Bahirji Smark Mahavidyalaya, Basmatnagar. 4th August 2017
12. Participated and delivered talk on **“The Adomian Decomposition Method for Numerical Solution of Differential Equations”** in International Conference on Mathematical Analysis and its Applications organized by Dayanand Science College Latur during March 5-9,2017.
13. Participated and delivered talk on **“Solution of Differential Equation Adomian by Using Decomposition Method”** in National Level Conference on Recent Trends in Mathematics organized by Arts, Science and Com. College Pathri on January 24,2017.
14. Delivered talk on **“Revised Syllabus in Mathematics”** in One Day Workshop on Revised Syllabus of B.Sc. Organized by Department of Mathematics Arts, Science & Commerce College, Badnapur on January 18 ,2016.
15. Delivered talk on **“Tools of Teaching in Mathematics”** in One Day Workshop on Syllabus organized by Department of Mathematics Yeshvanrao Chavan College, Sillod on January 7 ,2015.
16. Participated and delivered talk on **“The Recent Developments in the Theory of Time Degenerate Parabolic Problems”** in state Level Conference on Recent Advances in Mathematics and its Applications to Science & Engineering organized by Arts, Com. And Science College Jamner on December 16-17, 2013.
17. Participated and delivered talk on **“Recent Developments in the Theory of Time Degenerate Reaction Diffusion Problems”** in National Conference on Recent Trends in Mathematics organized Rammkrishna Paramhansa Mahavidyalaya Osmanabad. during September 27-28, 2014.
18. Participated and delivered talk on **“Mathematical Theory Reaction Diffusion Problems”** in National Conference on Advances in Computational Mathematics organized Vinayakrao Patil Mahavidyalaya Vaijapur Dist. Aurangabad on September 27, 2013.
19. Delivered talk on **“Basic Developments in Fractional Calculus”** in the State Level Conference on

Recent Trends in Mathematics at Arts, Commerce and Science College Sonai on March 5, 2013.

20. Delivered talk on “**Outcome Based Education**” in the Workshop organized Marathwada Shikshan Prasarak Mandal at Soundarao Solunke Mahavidyalaya, Majalgaon on January 20, 2019.

➤ **Lectures Delivered in Refresher Courses:**

1. Delivered Six lectures on “Maximum Principles in Differential Equations”, in the Refresher Courses in Mathematics \ Statistics Academic Staff College, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad on 17-20 March, 2015.
2. Delivered four lectures on “Oscillation Theory of Delay Differential Equations”, in the Refresher courses in Mathematics at Academic Staff College, Dr. Babasaheb Ambedkar Marathwada University, and Aurangabad on 16 & 20 December, 2013.

➤ **Paper Presented in Conferences \ Seminars and Workshops: (30)**

1. Participated and research paper Presented on the topic” Solution of Time Fractional Partial Differential Equations” in the Conference of the Indian Mathematical Society-An International Meet-2017 organized by Department of Mathematics, Karnataka University, Dharwad during December 12-15, 2017.
2. Participated and research paper presented on the topic” Solution of Time Fractional Partial Differential Equations” in the International Conference on “Innovative Research in Science & Technology” organized by Department of Mathematics R.B. Attal College Georai on 16 Feb. 16, 2019.
3. Participated and research paper presented on the topic “Numerical Solution of Time Fractional Telegraphic Fitzhuan-Nagumo Equation” in the International conference on “Innovation & Research in Technology & Engineering” organized by Department of Mathematics, Padmabhushan Vasantdada Patil Pratishthan College of Engineering Mumbai during 21&22 Dec. 20 18.
4. Participated and research paper presented on the topic “Thermal Flexural Analysis of Isotropic Plate Using New Trigonometric Shear Deformation Theory” in “International Conference on Technological Innovations in Engineering and Management,” organized by Department of Mathematics, Deogiri Institute of Engineering and Management Aurangabad during 26-27 February 2018.
5. Participated and research paper presented on the topic “Solution of Differential Equations Using Adomian Decomposition Method” in “National Conference on Pure and Applied Mathematics.” organized by Department of Mathematics, Yogeshwari Mahavidyalaya, Ambejogai during 11-13 January 2018.
6. Participated and research paper presented on the topic “Variational Iteration Method for Nonlinear Fractional Differential Equation and Applications” in “International Conference on Science, Soc Science and Management” organized by Department of Mathematics, Birla Institute of Applied Sciences, Bhimtal Utrakhand during June 12-14, 2017
7. Participated and research paper presented on the topic “Solution of Specific Fractional Differential Equations by Natural Integral Transform” in “International Conference on

Algebra, Discrete Mathematics and Applications organized by Department of Mathematics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad during Dec.9-11, 2017.

8. Participated and research paper presented on the topic "Application of Fractional Adomian Decomposition Method for Solving Nonlinear IBVP" in "National Level Conference on Recent Trends in Mathematics" organized by Department of Mathematics, Tata Institute of Fundamental Research during. July 15-16,2016
9. Participated and research paper presented on the topic "Application of Adomian Decomposition Method for Solving Highly Nonlinear Initial Boundary Value Problems." in "International Conference on Recent Advances in Theoretical and Computational PDE with Applications" organized by Department of Mathematics, Punjab University, Chandigarh during December 05-09,.2016.
10. Participated and research paper presented on the topic "Finite Difference Scheme for Time FDE" in "National Level Conference on Recent Trends in Mathematics" organized by Department of Mathematics, Arts, Science and Com. College Pathri on 24 Jan.2017.
11. Participated and research paper presented on the topic "Water Table Variations in a finite system in response to transient Recharge from a rectangular Basin." in "National Conference on Recent Advances in Mathematics" organized by Department of Mathematics, K.S.K. College Beed during March 21- 23,2016.
12. Participated and research paper presented on the topic "Solution of Fornberge Witham Equation by Using New Iterative Method" in "National Conference on Algebra, Analysis & Fuzzy Mathematics organized by Department of Mathematics, North Maharashtra University Jalgaon during December 05-09, 2016.
13. Participated and research paper presented on the topic "Existence and Uniqueness of Reaction Diffusion Problems Using Method of Upper and Lower Solution" in "National Conference on Recent Trends in Pure and Applied Mathematics" organized by Department of Mathematics, Science College, Nanded during Jan.9-11, 2014.
14. Participated and research paper presented on the topic "One Dimensional Mathematical Modeling of Water Table Fluctuations Due to Time Varying Recharge Basin," in "National Conference on Algebra, Analysis and Fuzzy Mathematics" organized by Department of Mathematics, North Maharashtra University Jalgaon Feb.21- 22,2014.
15. Participated and research paper presented on the topic "Monotone Method for Nonlinear Weakly Coupled Time Degenerate Parabolic system with Nonlinear Boundary Conditions," in "26 th International Conference of Jangeon Mathematical Society, South Korea" held at Acharya Institute of Graduate Studies, Bangalore during August 1-4,2013.
16. Participated and research paper presented on the topic "Method of Upper and lower solutions for non-linear time degenerate parabolic problems Existence & weakly Uniqueness results for Nonlinear coupled degenerate parabolic system," in "International Conference on Mathematical Modeling and Optimization Tech" organized by Department of Mathematics, SSBT's College of Engineering Jalgaon on July 26 & 27,2013.
17. Participated and research paper presented on the topic "Method of Upper and lower solutions for non-linear time degenerate parabolic problems" in "National Conference on Recent Advances in Mathematics and its Applications," organized by Department of Mathematics, Shrisant Gajanan Maharaj College of Engineering Shegaon during April 29-30, 2013.

18. Participated and research paper presented on the topic "Monotone method for time degenerate parabolic problems" in "National Conference on Current Practices in Mathematics, Statistics" organized by Department of Mathematics, School of Mathematical Sciences N.M.U. Jalgaon during, March 7-8, 2013.
19. Participated and research paper presented on the topic "A great Mathematician Professor V. Lakshmikantham," in "National Conference on Recent Developments in Mathematics and Statistics" organized by Department of Mathematics, Tuljarama Chaturchad College, Baramati during 14-16 Feb.2013.
20. Participated and research paper presented on the topic "A note on Pachpatte's Inequalities" in "National Conference on Recent Developments in Mathematics and Statistics" organized by Department of Mathematics, Loknete Vyankatrao Hiray Arts, Commerce and Science College, Panchavati, Nashik during 6-8 Feb.2012.
21. Participated and research paper presented on the topic "Survey of oscillation criteria for first order delay differential equation," in "National Conference on Recent Developments in UG and PG Mathematics" organized by Department of Mathematics, JES College, Jalna during 10-12 Jan.2011.
22. Participated and research paper presented on the topic "Numerical Solution of Wave equation by Finite Difference Scheme" in "National Seminar on Advances in Computational Mathematics" organized by Department of Mathematics, Rajarashi Shahu Mahavidyalaya Latur during 23-24 Feb.2011.
23. Participated and research paper presented on the topic "Monotone method for n Nonlinear Weekly Coupled Degenerate Parabolic system" in "International Conference on Recent Advances in Mathematical Sciences" organized by Department of Mathematics, Gyatri Vidya Prasad College of Engineering Vishakapatnam held during 19-22 Dec.2009.
24. Participated and research paper presented on the topic "Statistics of Synthetics Drug Consumption: A Survey of Rural" in "National Conference on Effect of Synthetic Drug on Human Metabolism organized by Department of Chemistry, Pratishtan College, Paithan during 8-9 Feb.2008.
25. Participated and research paper presented on the topic "Solution of Differential Equations by Using FDM Method." in "State Level Conference on Developments in UG and PG Mathematics organized by Department of Mathematics PES College of Engineering Aurangabad during 8-9 Feb.2008.
26. Participated and research paper presented on the topic "Delay Differential Equations." in "State Level Seminar on Recent Developments in UG and PG Mathematics organized by Department of Mathematics Shrikrishna College, Gunjoti during 22-24 Dec. 2004.
27. Participated and research paper presented on the topic "Oscillation and Nonoscillation Criteria for Differential Equations with Retarded Argument." in "National Conference on Nonlinear Analysis and Applications organized by Department of Mathematics Dr. Babasaheb Ambedkar Marathwada University Aurangabad during 24-25 March 2004.
28. Participated and research paper presented on the topic "A note on Delay Differential Equations." in "State Level Seminar on Recent Developments in UG and PG Mathematics organized by Department of Mathematics Maoulana Azad College Aurangabad during 28-30 August 2003.
29. Participated and research paper presented on the topic "Some Maximum Principles in

Differential Equations.” in “State Level Seminar on Recent Advances in Effective Teaching at U.G. Level organized by Department of Mathematics Yogeshwari College, Ambejogai during 5-7 Dec.2002.

30. Participated and research paper presented on the topic “Some New Methods of Teaching Mathematics” in State Level Instructional Seminar on Recent Developments in Graduate and U.G. Level Mathematics organized by Department of Mathematics at Deogiri College, Aurangabad on November 9 and 10,2000.

➤ **Session Chaired in Conferences, Seminars and Workshops :(16)**

1. Chaired the session for oral presentation of research papers in One Day National Conference in International e-Conference on Nonlinear Analysis and Applications organized by Department of Mathematics, Dayanand Science College, Latur on July 27-29, 2020
2. Chaired the Technical session in One day National Conference on Recent Trends in Physics, Chemistry & Mathematics organized by Department of Mathematics, Sundarrao Solunke Mahavidyalaya, Majalgaon on February 08,2020.
3. Chaired the Planary Session in Three-day National Conference on Recent Trends in Mathematics and its Applications organized by Department of Mathematics, Anandrap Dhonde Mahavidyalaya, Kada on January 16-18 ,2020.
4. Chaired the session for oral presentation of research papers in Fourth International Conference on “Computing in Engineering and Technology” organized by Deogiri Institute Engineering and Management Studies of on January 11,2019. (Springer).
5. Chaired the session for oral presentation of research papers in the International Conference on “Innovative Research in Science & Technology” organized by Department of Mathematics R.B. Attal College Georai on16 Feb. 16,2019.
6. Chaired the session in Technical session in three days National Conference on Recent Trends in Mathematics and its Applications organized by Department of Mathematics, Maharaja Sayajirao Gaikwad College Malegaon on Dec 27-29, 2018.
7. Chaired the session for oral presentation of research papers in International Conference on Mathematical Analysis and its Application at Dayanand Science College, Latur on March 5-9, 2017.
8. Chaired the session for oral presentation of research papers in National Conference on Algebra, Analysis and Fuzzy Mathematics, North Maharashtra University Jalgaon on Jan. 30, 2016.
9. Chaired the session for oral presentation of research papers in National Conference on Recent Trends in Mathematics at Tata Institute of Fundamental Research, Tuljapur March 10-11,2016
10. Chaired the session for oral presentation of research papers in National Conference on Recent Trends in Fractional Calculus at Hire College, Nasik on March 10-11, 2016.
11. Chaired the Special session in National Conference on Recent Trends in Mathematics at K.S.K. College, Beed on March 21-23,2016.
12. Chaired the session for oral presentation of research papers in National Conference on

Algebra, Analysis and Fuzzy Mathematics, North Maharashtra University Jalgaon on Feb.21-22,2014.

13. Chaired Plenary Session in Recent Trends in Mathematics organized by Department of Mathematics, Deogiri College, Aurangabad on 23-25 December 2014.
14. Chaired the session for oral presentation of research papers in Recent Trends in Pure and Applied Mathematics organized by Department of Mathematics Science College, Nanded on Jan.9-11,2014
15. Chaired the session for oral presentation of research papers in the Conference on Recent Advances in Mathematics and its Applications to Science & Engineering. Organized by Department of Mathematics, Shrishant Gajanan Maharaj Engineering College, Shegaon on April 29-30, 2013.
16. Chaired the session in the National Conference on "Advances in Computational Mathematics" organized by Department of Mathematics, Vinayakrao Patil Mahavidyalaya, Vaijapur, and Dist. Aurangabad during September 27-28, 2013,

➤ **Orientation / Refresher Courses Attended:**

1. Participated in Orientation Course conducted by Academic staff College Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. (2/5/1997 To 30/5/1997).
2. Participated in "**Refresher Course in Mathematical Sciences (Mathematics, Statistics and Economics)**" during 14/9/1998 to 13/10/1998 organized by Academic Staff College Dr. Babasaheb Ambedkar Marathwada University. Aurangabad.
3. Participated in "**Refresher Course in Mathematics and Statistics**" during 20/2/2006 to 11/3/2006 organized by Academic Staff College Dr. Babasaheb Ambedkar Marathwada University. Aurangabad.
4. Participated in UGC Sponsored Short Term Course **on Research Grants, Publication and Methods** during 7/7/2014 to 12/7/2014 conducted by Academic Staff College Dr. Babasaheb Ambedkar Marathwada University. Aurangabad.
5. Participated in NSS Orientation Course conducted by NSS Training and Orientation Centre Ahmednagar College, Ahmednagar (3/8/1999 to 12/8/1999).
6. Participated in NSS Refresher Course conducted by NSS Training and Orientation Centre Ahmednagar College, Ahmednagar (17/3/2002 to 21/3/2002).

➤ **Contribution to University/College /Department:**

- Local Management Council member Pratishthan Mahavidyalaya, Paithan.
- P.G. Coordinator, Pratishthan Mahavidyalaya, Paithan.
- Member of Internal Quality Assurance Cell Pratishthan Mahavidyalaya, Paithan.
- Worked as a Member of BUTR Committee Dr. Babasaheb Ambedkar Marathwada University Aurangabad
- Coordinator of Seminar Competition of Marathwada Mathematical Society.
- Coordinator of Ramanujan Quiz Competition of Marathwada Mathematical Society
- Executive Council Member of Marathwada Mathematical Society.

- Chairman, Board of Examinations and Paper setters of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Swami Ramanand Marathwada University, Nanded, Yeshvantrao Chavan Open University, Nasik.
- Chairman for flying squad for B.A., B. Sc. and B. Com. examination of April/May, 2019 at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad,
- Chancellor's Subject expert for selection of Assistant Professors in various Colleges affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- Vice Chancellor's Subject expert for Career Advance Scheme of Assistant Professors, Associate Professors and Professors in various Colleges affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- Organized workshop on Syllabus of Mathematics for under Graduate Course
- Chairman and Member of College Affiliation Committee of various Colleges affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

➤ **Extension Activities / Community Services:**

- Programme officer National Service Scheme (NSS) from 1998 to 2014.
- Extension Programme officer Lifelong and Extension Services from 2006 to 2014.
- Member of NSS Advisory Committee NSS Cell, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- NSS Area Coordinator
- Organized 20 N.S.S. Special Camps under different themes
- Attended 25 Workshops, Seminars and Training Programs related to NSS.
- Delivered 20 talks in NSS Special Camps and Colleges
- Participated in Aids Awareness Programs, Pulse Polio Immunization Programme, Watershed Awareness, Environment Protection, Matdar Jagruti Abhiyan, Adult Education, Personality development etc.
- Worked as a Sayuct Mantri and member of Maharashtra Hindi Prachar Sabha, Aurangabad.
- Worked as a member of Hindi Prachar Sabha, Hyderabad.