PROF. RAMJIWARI
Professor
Indian Institute of Technology Roorkee
Roorkee-247667 (U.K.) India
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Email: ram1maths@gmail.com; ram.jiwari@ma.iitr.ac.in

Research Interests:
Numerical Analysis, Finite Element Methods, Weak Galerkin Methods, HHO Methods, Meshfree Methods Wavelets Analysis, Computational Modeling, Machine Learning.

ACADEMICANDRESEARCHBACKGROUND

1. **Post Doc Fellow** (2013 to 2014)	Institute of Industrial Mathematics, Federal University do Paraná, Brazil
2. **Ph.D**(July 2010)	Department of Mathematics, IIT Roorkee
3. **M.Sc.** (2003-2005)	Kurukshetra University, Kurukshetra, India

PH.D. STUDENTS

1. **Dr. Vikas Kumar**	**Awarded 2014**
2. **Dr. Anjali Verma**	**Awarded 2015**
3. **Dr. Om Prakash Yadav**	**Awarded 2019**
4. **Dr. Sanjay Kumar**	**Awarded 2021**
5. **Dr. Sudhir Kumar**	**Awarded 2021**
6. **Dr. Jasbir Singh**	**Awarded 2024**
7. **Dr. Ankur**	**Awarded 2024**
8. **Mr. Ajeet Singh**	Work under progress since Dec, 2021
9. **Mr. Devraj**	Work under progress since, July 2023
10. **Mr. Keshav Chaturvedi**	Work under progress since July, 2024

Master Thesis Supervised: 40

LISTOFPUBLICATIONS

□□Articles published/accepted in refereed journals

1. Ankur, **Ram Jiwari** and A. Narayan, Conformal Finite Element Methods for nonlinear Rosenau-Burgers-biharmonic models**, Journal of Scientific Computing, (2025) Accepted.**

2. Naresh Kumar, Jasbir Singh and **Ram Jiwari**, An ADI type operator splitting WG-FEM for 2D nonlinear unsteady singularly perturbed problem, **Numerical Algorithms**, (2025) doi.org/10.1007/s11075-025-02061-5**. (IF: 1.7)**

3. A. Singh**, Ram Jiwari,** Vikram, U. Saini, PINNs Algorithmic Framework for Simulation of Nonlinear Burgers' Type Models, arxiv.org/abs/2506.12922v1, 2025.

4. N. Kumar, Ajeet Singh, Ram Jiwari and J. Y. Yuan, Error estimates with polynomial growth O(ε−1) for the HHO method on polygonal meshes of the Allen-Cahn model, **Applied Numerical Mathematics,** 211 (2025), 78-102. **(IF: 2.8)**
5. Ajeet Singh, H. M. Cheng, Naresh Kumar and **Ram Jiwari**, A high order numerical method for analysis and simulation of 2D semilinear Sobolev model on polygonal meshes, **Mathematics and Computers in Simulation**, 227(2025) 241-262 **(IF: 4.4)**
6. Jasbir Singh, Naresh Kumar**, Ram Jiwari**, A robust weak Galerkin finite element method for two parameter singularly perturbed parabolic problems on nonuniform meshes, **Journal of Computational Science**, 77 (2024) 102241 **(IF 3.3)**
7. Ankur and **Ram Jiwari,** A new error estimates of finite element method for (2+1)-dimensional nonlinear advection-diffusion model, **Applied Numerical Mathematics**, 198 (2024) 22-42 **(IF: 2.8).**
8. Naresh Kumar, Şuayip Toprakseven and **Ram Jiwari**, A numerical method for singularly perturbed convection-diffusion-reaction equations on polygonal meshes**, Computational and Applied Mathematics**, 43 (44) (2024) **(IF: 2.6).**
9. **Ram Jiwari**, Naresh Kumar and Jasbir Singh, Convergence Analysis of Weak Galerkin Finite Element Method for Semilinear Parabolic Convection Dominated Diffusion Equations on Polygonal Meshes, **Computers and Mathematics with Applications**,145 (2023) 141-158. **(IF: 3.218).**
10. Ankur and **Ram Jiwari**, New multiple analytic solitonary solutions and simulation of (2+1)-dimensional generalized Benjamin-Bona-Mahony-Burgers model, **Nonlinear Dynamics**, 111(2023)13297-13325. **(IF: 5.741)**
11. Ankur, **Ram Jiwari**, Naresh Kumar, Analysis and simulation of Korteweg-de Vries-Rosenau-regularised long-wave model via Galerkin finite element method, **Computers& Mathematics with Applications**, 135 (2023) 134-148. **(IF: 3.218)**
12. Vikas Kumar, **Ram Jiwari**, AR Djurayevich, MU Khudoyberganov, Hyperbolic (2+ 1)-dimensional Schrödinger equation: Similarity analysis, Optimal system and complexitons for the one-parameter group of rotations ,**Communications in Nonlinear Science and Numerical Simulation,** 115 (2022) 106784. **(IF: 4.186)**
13. **Ram Jiwari,** Local radial basis function-finite difference based algorithms for singularly perturbed Burgers' model, **Mathematics and Computers in Simulation,** 198, (2022) 106-126. **(IF: 3.601)**
14. R. C. Mittal, Sudhir Kumar and **Ram Jiwari,** A cubic B-spline quasi-interpolation algorithm to capture the pattern formation of coupled reaction diffusion models, **Engineering with Computers,** 38 (2022) 1375-1391. **(IF: 8.083)**
15. V Kumar, **Ram Jiwari,** AR Djurayevich, MU Khudoyberganov, Hyperbolic (3+ 1)-Dimensional Nonlinear Schrödinger Equation: Lie Symmetry Analysis and Modulation Instability, Journal of Mathematics, (2022) Article ID 9050272. **(IF 1.555)**
16. K Harish Kumar and **Ram Jiwari**, A hybrid approach based on Legendre wavelet for numerical simulation of Helmholtz equation with complex solution, **International Journal of Computer Mathematics**, 99 (2022) 2221-2236. **(IF: 1.931)**
17. **Ram Jiwari,** Sukhveer Singh, Paramjeet Singh, Local RBF-FD-Based Mesh-free Scheme for Singularly Perturbed Convection-Diffusion-Reaction Models with Variable Coefficients, Journal of Mathematics, (2022), Article ID 3119482, doi.org/10.1155/2022/3119482. **(IF: 1.555)**

18. Sanjay Kumar, **Ram Jiwari**, RC Mittal, Radial basis functions based meshfree schemes for the simulation of non-linear extended Fisher-Kolmogorov model, **Wave Motion**, (2022)102863. **(IF: 2.174)**
19. **Ram Jiwari,** Vikas Kumar and Sukhveer Singh, Lie group analysis, exact solutions and conservationlawstocompressibleisentropicNavier-Stokesequation,**Engineeringwith Computers,** 38 (2022) 2027-2036. **(IF: 8.083)**
20. AM Alqahtani and **Ram Jiwari**, Wavelet operational matrices and Lagrange interpolation differential quadrature-based numerical algorithms for simulation of nanofluid in porous channel, **Journal of Mathematics**, (2022) Article ID 5015018. **(IF: 1.555)**
21. K. H. Kumar and **Ram Jiwari**, A note on numerical solution of classical Darboux problem, **Mathematical Methods in the Applied Sciences**, 44 (2021) 12998-13007. **(IF: 3.007)**
22. Sanjay Kumar, **Ram Jiwari,** R. C. Mittal and Jan Awrejcewicz, Dark and bright soliton solutions and computational modeling of non-linear regularized long wave model, **Nonlinear Dynamics,** 104,(2021) 661-682**.(IF: 5.741)**
23. **Ram Jiwari** and Alf Gerisch, A local radial basis function differential quadrature semidiscretisation technique for the simulation of time-dependent reaction-diffusion problems**, Engineering Computations,** 38 (6) (2021) 2666-2691. **(IF: 1.675)**
24. **Ram Jiwari**, Barycentric rational interpolation and local radial basis functions based numerical algorithms for multidimensional sine-Gordon equation, **Numerical Methods for Partial Differential Equations**, (2021) (37) 1965–1992. **(IF: 3.568)**
25. K. H. Kumar and **Ram Jiwari**, Legendre wavelets based numerical algorithm for simulation of multidimensional Benjamin-Bona-Mahony-Burgers and Sobolev equations,**Computers and Mathematics with Applications,** 80(3)(2020)417-433. **(IF: 3.476)**
26. R C Mittal, S Kumar, **Ram Jiwari**, A cubic B-spline quasi-interpolation method for solving two-dimensional unsteady advection diffusion equations, **InternationalJournalofNumericalMethodsforHeat&FluidFlow,**(2020)DOI10.1108/ HFF-07- 2019-0597. **(IF: 5.181)**
27. **Ram Jiwari,** Sanjay Kumar and Jan Awrejcewicz, A meshfree algorithm for simulation of multidimensional Schrödinger equations, **Computational and Applied Mathematics**, (2020) doi.org/10.1007/s40314-020-1113-0. **(IF: 2.998)**
28. Sapna Pandit, **Ram Jiwari** and M. E. Koksal, A class of numerical algorithms based on cubic trigonometric B-spline functions for numerical simulation of nonlinear parabolic problems, **Computational and Applied Mathematics,** (2019) doi.org/10.1007/s40314-019-0918-1. **(IF: 2.998)**
29. Om Prakash Yadav and **Ram Jiwari,** A finite element approach for analysis and computational modelling of coupled reaction diffusion models, **Numerical Methods for Partial Differential Equations**, 35 (2) (2019) 830-850. **(IF: 3.568)**
30. Om Prakash Yadav and **Ram Jiwari,** Some soliton-type analytical solutions and numerical simulation of nonlinear Schrödinger equation, **Nonlinear Dynamics**, 95(2019) 2825-2836. **(IF: 5.741)**
31. Sanjay Kumar, **Ram Jiwari** and R. C. Mittal, Meshfree algorithms based on radial basis functions for numerical simulation and to capture shocks behavior of Burgers' types problems, **Engineering Computations,** 36(4) (2019) 1142-1168. **(IF: 1.675)**
32. Sanjay Kumar, **Ram Jiwari** and R. C. Mittal, Numerical simulation for computational modellingofreaction-diffusionBrusselatormodelarisinginchemicalprocesses,**Journal of Mathematical Chemistry,** 57 (2019) 149-179. **(IF: 2.413)**

33. Om Prakash Yadav and **Ram Jiwari,** A finite element approach to capture Turing patternsofautocatalyticBrusselatormodel,**JournalofMathematicalChemistry**,57(3) (2019) 769-789. **(IF: 2.413)**
34. **Ram Jiwari,** Stefania Tomasiello and Francesco Tornabene, A numerical algorithm for computational modelling of coupled advection-diffusion-reaction systems, **Engineering Computations**, 35 (3) (2018) 1383-1401. **(IF: 1.675)**
35. **Ram Jiwari,**H. S. Shukla, M Tamsir andV. K. Srivastava, A numerical algorithm for computation modeling of 3D nonlinear wave equations based on exponential modified cubic B-spline differential quadrature method, **International Journal of Computer Mathematics**, 95 (4) (2018) 752-766. **(IF: 1.931)**
36. **Ram Jiwari,** Sukhveer Singh and Ajay Kumar, Numerical simulation to capture the patternformationofcoupledreaction-diffusionmodels,**Chaos,Solitons&Fractals,**103 (2017) 422-439. **(IF: 9.922)**
37. **Ram Jiwari,** Vikas Kumar, Ram Karan and A. S. Alshomrani, Haar wavelet quasilinearization approach for MHD Falkner–Skan flow over permeable wall via Lie group method, **International Journal of Numerical Methods for Heat & Fluid Flow**, 27 (6) (2017) 1332-1350. **(IF: 5.181)**
38. Sapna Pandit, **Ram Jiwari,** K Bedi and M. E. Koksal, Haar wavelets operational matrix based algorithm for computational modelling of hyperbolic type wave equations**, Engineering Computations,** 34 (8) (2017) 793-814**. (IF: 1.675)**
39. A. Alshomrani, Sapna Pandit, A. K. Alzahrani, M. S. Alghamdi, **Ram Jiwari,** A numerical algorithm based on modified cubic trigonometric B-spline functions for computational modelling of hyperbolic type wave equations,**Engineering Computations,** 34 (4) (2017) 1257-1276. **(IF: 1.675)**
40. Om Prakash Yadav and **Ram Jiwari**, Finite element analysis and approximation of Burgers'-Fisherequation,**NumericalMethodsforPartialDifferentialEquations**,33 (5)(2017)1652-1677.**(IF:3.568)**
41. Maria A. De Rosaa, Maria Lippiello, **Ram Jiwari**, Stefania Tomasiello, A differential quadrature based procedure for parameter identification, **Applied Mathematics and Computation,** 290 (2016) 460-466. **(IF: 4.397)**
42. M. Tamsir, V. K. Srivastava, **Ram Jiwari,** An algorithm based on exponential modified cubic B-spline differential quadrature method for nonlinear Burgers' equation, **Applied Mathematics and Computation,** 290 (2016) 111-124. **(IF: 4.397)**
43. S. Garhwal and **Ram Jiwari**, Conversion of fuzzy automata into fuzzy regular expressions using transitive closure, **Journal of Intelligent & Fuzzy Systems**, 30 (6) (2016) 3123-3129. **(IF: 1.851)**
44. **Ram Jiwari** and A. S. Alshomrani, A new algorithm based on modified trigonometric cubic B-splines functions for nonlinear Burgers'-type equations, **International Journal of Numerical Methods for Heat & Fluid Flow,** 27 (8) (2017) 1638-1661. **(IF: 5.181)**
45. S. Garhwal and **Ram Jiwari**, Parallel fuzzy regular expression and its conversion to epsilon-free fuzzy automaton, **The Computer Journal**, 59(9) (2016) 1383-1391. **(IF: 1.494)**
46. A. Verma and **Ram Jiwari,** Cosineexpansion based differential quadrature algorithm for numerical simulation of two dimensional hyperbolic equations with variable coefficients, **International Journal of Numerical Methods for Heat & Fluid Flow**, 25 (7) (2015) 1574-1589. **(IF: 5.181)**

47. **Ram Jiwari,** Lagrange interpolation and modified cubic B-spline differential quadrature methods for solving hyperbolic partial differential equations with Dirichlet and Neumann boundaryconditions,**ComputerPhysicsCommunications**,193(2015)55-65.**(IF: 4.717)**
48. **Ram Jiwari**, A hybrid numerical scheme for the numerical solution of the Burgers' equation, **Computer Physics Communications,** 188 (2015) 59-67. **(IF: 4.717)**
49. Vikas Kumar, **Ram Jiwari** and R K Gupta, Exact and numerical solutions of coupled short pulse equation with time-dependent coefficients, **Nonlinear Dynamics, 79 (1)(2015) 455-464. (IF: 5.741)**
50. Anjali Verma, **Ram Jiwari** and M. E. Koksal, Analytic and numerical solutions of nonlinear diffusion equations via symmetry reductions, **Advances in Difference Equations**, **DOI:10.1186/1687-1847-2014-229 (2014).(IF: 2.803)**
51. **Ram Jiwari,** R.K. Gupta and Vikas Kumar,Polynomial differential quadrature method for numerical solutions of the generalized Fitzhugh-Nagumo equation with time-dependent coefficients, **Ain Shams Engineering Journal, 5(2014) 1343-1350. (IF: 4.79)**
52. Anjali Verma, **Ram Jiwari** and Satish Kumar, A numerical scheme based on differential quadrature method for numerical simulation of nonlinear Klein-Gordon equation, **International Journal of Numerical Methods for Heat and Fluid Flow, 24 (7) (2014) 1390-1404**. **(IF: 5.181)**
53. **Ram Jiwari**and Jinyun Yuan, A computational modeling of two dimensional reaction-diffusion Brusselator system arising in chemical processes, **Journal of Mathematical Chemistry, 52 (2014) 1535-1551. (IF: 2.413)**
54. Vikas Kumar,**Ram Jiwari** and R K Gupta, Lie Group analysis, numerical and non-traveling wave solutions for the (2+1)-dimensional Diffusion-Advection equation with variable coefficient, **Chinese Physics B, 23 (3) (2014) 030201. (IF: 1.494)**
55. **Ram Jiwari**, R.C. Mittal and K K Sharma**,** A numerical scheme based on weighted average differential quadrature method for the numerical solution of Burgers' equation, **Applied Mathematics and Computation, 219 (2014) 6680–6691. (IF: 4.397)**
56. Vikas Kumar, **Ram Jiwari** and R K Gupta**,** Numerical Simulation of Two Dimensional Quasilinear Hyperbolic Equations by Polynomial Differential Quadrature Method**, Engineering Computations, 30 (7) 2013, 892-909. (IF: 1.675)**
57. VikasKumar**,RamJiwari**andRKGupta,PainlevéAnalysis,LieSymmetriesandExact Solutions for Variable Coefficients Benjamin-Bona-Mahony-Burger (BBMB) Equation, **Communications in Theoretical Physics, 60 (2013) 175–182. (IF: 1.968)**
58. Vikas Kumar**, Ram Jiwari** and R K Gupta**,** Comparative Study of Travelling Wave and NumericalSolutionsfortheCoupledShortPulse(CSP)Equation,**ChinesePhysicsB,22 (5)(2013)050201.(IF:1.494)**
59. R C Mittal, **Ram Jiwari** and K K Sharma**,** A numerical scheme based on differential quadrature method to solve time dependent Burgers' equation, **Engineering Computations, 30 (1) (2013) 117-131. (IF: 1.675)**
60. **Ram Jiwari,** Haar wavelet quasilinearization approach for numerical simulation of Burgers'equation,**ComputerPhysicsCommunications,183(2012)2413-2423**.**(IF: 4.717)**

61. R.C. Mittal and **Ram Jiwari**, A differential quadrature method for solving Burgers'-type equation, **International Journal of Numerical Methods for Heat and Fluid Flow, 22 (7), (2012), 880-895. (IF: 5.181)**
62. **Ram Jiwari,** S. Pandit and R C Mittal**,** Numerical simulation of two-dimensional sine-Gordon solitons by differential quadrature method, **Computer Physics Communications, 183 (2012) 600-616. (IF: 4.717)**
63. **Ram Jiwari,** S. Pandit and R C Mittal**,** A Differential quadrature algorithm to solve the two dimensional linear hyperbolic telegraph equation with Diriclet and Neumann boundary conditions, **Applied Mathematics and Computation, 218 (2012) 7279–7294. (IF: 4.397)**
64. R.C. Mittal and **Ram Jiwari**, Differential quadrature method for Numerical Solution of coupled viscous Burgers' equations, **Int. J. for Comput. Methods in Eng. Science and Mech**, **13 (2012), 1-5.**
65. D. Sharma, **Ram Jiwari, and** Sheo Kumar**,** A comparative study of Modal matrix and finite elements methods for two point boundary value problems**, Int. J.of Appl. Math. and Mech. 8 (13) (2012), 29-45. (IF. 2.866)**
66. **Ram Jiwari,** Sapna Pandit and R C Mittal**,** A differential quadrature algorithm for the numerical solution of the second-order one dimensional hyperbolic telegraph equation, **Int J of Nonlinear Sciences, 13 (3) (2012), 259-266.**
67. **RamJiwari,**Dinkar Shrma and Sheo Kumar**,** Numerical solutions of two point boundary value problems using Galerkin-Finite element method, **Int J of Nonlinear Sciences, 13 (2)(2012), 204-210.**
68. R.C. Mittal and **Ram Jiwari,** A Numerical Scheme for singularly perturbed Burger-Huxley Equation, **J. Appl. Math. & Informatics, 29 (2011), No. 3-4, 813-829.**
69. R.C. Mittal and **Ram Jiwari,** A Numerical scheme for some nonlinear differential equations models in Biology, **Int. J. for Comput. Methods in Eng. Science and Mech., 12 (3), (2011), 134-140.**
70. R.C. Mittal and **Ram Jiwari**, Numerical study of two-Dimensional reaction-diffusion Brusselatorsystem,**AppliedMathematicsandComputation,217(12)(2011),5404-5415.(IF:4.397)**
71. **Ram Jiwari,** Dinkar Shrma and Sheo Kumar**,** Galerkin-finite element method for the numerical solution of advection-diffusion equation**, IJPAM, 70 (3) (2011), 389-399.**
72. R.C. Mittal and **Ram Jiwari**, Numerical study of Burger-Huxley equation by differential quadrature method, **Int. J. of Appl. Math. and Mech., 5(8) (2009), 1-9. (IF. 2.866)**
73. R.C. Mittal and **Ram Jiwari**, Differential quadrature method for two dimensional Burgers'equations,**Int. J. for Comput. Methods in Eng. Science and Mech**,**10(2009), 450-459**.
74. R.C. Mittal and **Ram Jiwari**, A Spectral method for suspension bridge model, **Int. J. of Appl. Math. and Mech., 5(5) (2009), 66-75. (IF. 2.866)**
75. R.C. Mittal and **Ram Jiwari,** Numerical study of Fisher's equation by using differential quadrature method, **Int. J. Information and systems Sciences**, **5(1)(2008), 143-160.**
76. **Ram Jiwari,** A Spectral method for the solution of a fourth order integro-differential equation, **IX International Scientific Conference "Science and Education" (28-29 March, 2012) Kemerovo State University, Belovo Institute, Russia, pp. 119-124.**

□□RESEARCHPROJECTS

1. **Ram, Jiwari (Principal Investigator),** Fast and Robust Numerical Algorithms for 2D Unsteady-state Convection Dominated Singularly Perturbed Parabolic Models: Theoretical Analysis and Computational Modeling, **SERB 2022, Cost 6.6 Lacs**
2. **Ram, Jiwari (Principal Investigator)**, Theoretical Analysis and Simulation to Capture Complex Patterns of Nonlinear Reaction-Diffusion Models, **NBHM 2021, Cost 16 Lacs**
3. **Ram, Jiwari (Principal Investigator)**, Lie Symmetry Analysis, Simulation and Lyapunov Stability Analysis of the Hyperbolic Systems, **Indo-Uzbek International Project (DST) 2021, Cost 32 Lac Appx.**
4. **Ram, Jiwari (Principal Investigator)**, Theoretical Analysis and Numerical Simulation of Unsteady-State Singularly Perturbed Parabolic Model, **CSIR 2019, Cost 20 Lacs (Appx.).**
5. **Ram, Jiwari (Principal Investigator)**, Numerical Analysis and Computational Modeling of Nonlinear Parabolic Mathematical Models with Singular and Variable Coefficients, **Young Scientist (SERB 2016), Cost 18.06 Lacs (Appx.)**
6. **Ram Jiwari (Principal Investigator),** Numerical Analysis and Computational Modelingof Hyperbolic Partial Differential Equations, **FIG (IIT Roorkee 2014), Cost 6.5 Lacs**.

AWARDS/FELLOWSHIPS

1. **CIMPA-ICTP" Research in Pairs" programme (2025),** Italy, France
2. **Ulam NAWA Research Fellowship 2024**, Polish National Agency, Poland
3. **Haryana Yuva Vigyan Ratna Awards 2020,** DST, Haryana Govt.
4. **DAAD Bilateraler Wissenschaftleraustauschat** Technische Universität Darmstadt**, Germany, 2017**
5. **Post Doc Fellow,** Institute of Industrial Mathematics**, Federal University do Paraná, Brazil, 2013.**
6. **Fundaçãopara a Ciênciae a Tecnologia (FCT),Fellowship of Portugal**, 2011
7. Graduate Aptitude Test in Engineering **(GATE-AIR-38),** 2011, India
8. **Senior Research Fellowship, CSIR, 2008**
9. National Eligibility Test **(NET)** & Junior Research Fellowship **(JRF),** CSIR, India, 2005.

TEACHING/RESEARCH EXPERIENCE

1. **Professor, Indian Institute of Technology Roorkee, India** (2025 to till date)
2. **Associate Professor, Indian Institute of Technology Roorkee, India** (10 Aug 2020 to Dec, 2024)

3. **Assistant Professor, Indian Institute of Technology Roorkee, India** (03-06-2014 to 09-08-2020)
4. **Post Doc Fellow, Federal University do Paraná, Brazil** (2013 to 2014)
5. **Dr BR Ambedkar National Institute of Technology Jalandhar, India (2010 to 2011)**

WORKSHOP ORGANIZED

1. **Indo-French Workshop on** "Innovative Numerical Methods for Modern Engineering Problems"**06-10 Jan, 2025** Funded by CEFIPRA
2. Applications of Computational Techniques in Engineering using MATLAB, 02-07 June, 2019 at QIP IIT Roorkee, Funded by AICTE.
3. **Advanced Computational Techniques for Differential Equations with MATLAB**, (ACTDEM 2018), 18- 22 Sep, 2018 at Department of Mathematics, IIT Roorkee, Funded by NBHM, CSIR.
4. **Computational Techniques for Differential Equations with MATLAB** (CTDE 2015),#02-06 July, 2015 at Department of Mathematics, IIT Roorkee, Funded by DST, UCOST.

INVITEDTALKS

1. Developments in Computational Techniques in Science and Engineering**, 17-18Feb, 2024, MNIT Jaipur.**
2. Modelling and Simulation in Science and Engineering**, 19-23 Feb,2024, MNIT Jaipur.**
3. Invited lecture on "Basics of FEM" 13Feb, 2024 at SRM Institute of Science and Technology Delhi-NCR Campus Ghaziabad.
4. Invited talk in Refresher Course 04-16 Dec, 2023 at Punjabi University, Patiala.
5. FEMTCA-2023, 4-8 Dec, 2023 at Department of Mathematics, NIT Trichy
6. Mathematical modeling in physical sciences & engineering, School of Advanced Sciences**, VIT Vellore, Jan, 2023**
7. Mathematical modeling of differentially rotating stars in stellar system**, Graphic Era Deemed to be university, Oct, 2022**
8. Recent development in Numerical Methods for Partial differential equations, **NIT Hamirpur, May, 2022**
9. Differential Equations and Mathematical Modelling**, Jaypee Institute of Information Technology, Noida, Feb, 2022**
10. Recent Development in Mathematical Modelling in Engineering Sciences**, NIT Uttarakhand, Dec, 2021**
11. SIAM Conference on Analysis of Partial Differential Equations**, Universityof California (Dec, 2019)**
12. **Technische Universität (TU) Darmstadt, Germany (June, 2017), InvitedT alk**

13. **Universidade Federal do Paraná, Brazil (2014), Invited Talk on Finite Element Methods**
14. New Frontiers in Numerical Analysis and Scientific Computing (17-18April,2013) Conference held at **Kent State University, USA (Invited Talk).**
15. NUMDIFF-13 (Sept 2012) Conference & Symposium held at **Martin-Luther University, Halle, GERMANY.**
16. Workshop on **FEM** held at **TIFR CAM Bangalore** from 2July to 13July,2012
17. Workshop **WMMFA on wavelets** held at **IIT Bombay** March 2012
18. Workshop on **Differential Equations and Mathematical Modelling**, held at **Delhi University**, 9 to 11 Feb, 2012.
19. **Symposium** held at **TIFR CAM Bangalore** Jan 2011.
20. One month School organized by **NBHM at Panjab University Chandigarh**Dec 2008.
21. **Symposium** held at **IISCBangalore** 2008.
22. **NUMDIFF-12(2009)** Conference & Symposium held at **Martin-LutherUniversity, Halle, GERMANY.**

REVIEWEROFREFEREDJOURNALS

1. **Computer Physics Communications (Elsevier)**
2. **Mathematical Methods in the Applied Sciences (Wiley Publication)**
3. **Applied Mathematical Modelling (Elsevier)**
4. **Applied Mathematical and Computation(Elsevier)**
5. **Computers and Mathematics with Applications (Elsevier)**
6. **Neural Computing and Applications(Springer)**
7. **Nonlinear Dynamics(Springer)**
8. **Engineering Computations(Emerald)**
9. **International Journal of Numerical Methods for Heat and Fluid Flow (Emerald)**
10. **Journal of Scientific Computing (Springer)**
11. **Applied Numerical Mathematics (Elsevier)**

REFERENCES

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2. **Prof. Kapil Kumar Sharma**
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