Faculty Details

Full Name	: Dr. Rakesh Tiwari
Date of Birth	: 25 November, 1966
Educational Qualification	: M.Sc., Ph. D.
Date of Ph.D. award	: 16 February, 2009
No. of Ph.D. supervised	: 05
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Published Papers in National / International Journals (73)

- H. K. Pathak, M. S. Khan, Rakesh Tiwari and Brian Fisher, Fixed point theorem for Banach space over topological semifields and its application, Thai J. Math. 1(2) (2003), 81-85. MR2097809 (2005f:47131).
- 2. H. K. Pathak and Rakesh Tiwari, Fixed point theorems for expansion Mappings satisfying implicit relations, **Filomat**, 20(1) (2006), 43-57. MR2311572.
- 3. Rakesh Tiwari and S. K. Shrivastava, Fixed point theorem and co-incidence point, South East J. Math. & Math. Sc., 5(1) (2006), 91- 96. MR2301682.
- 4. H. K. Pathak and Rakesh Tiwari, A common fixed point theorem for weakly compatible mappings, **Proceedings of B.H.U**., 26(2006), 1-12.
- 5. H. K. Pathak, M. S. Khan and Rakesh Tiwari, A common fixed point theorem and its application to nonlinear integral equations, **Computer and Mathematics with Applications**, 53(2007), 961-971. MR2333339 (2008f:45012).
- 6. H. K. Pathak, Rakesh Tiwari and M. S. Khan, Common fixed-point Theorem satisfying integral type implicit relations, **Applied Mathematics E-notes** 7(2007), 222-228. MR2346046 (2008f:47096).
- 7. H. K. Pathak and Rakesh Tiwari, A common fixed point theorem satisfying Implicit relations and its application, **Journal of Non-Linear Functional Analysis** and Differential Equations 2(1) (2008) 29-37.

- 8. Brian Fisher, H. K. Pathak and Rakesh Tiwari, Common fixed point theorems, **Thai J.Math. 7** (1) (2009), 137-149. MR2540691.
- 9. Rakesh Tiwari and Savita Gupta, A common fixed-point theorem with asymptotically regularity conditions, J. Nat. Acad. Math. S.V. (2009), 182-188.
- Rakesh Tiwari, S.K. Shrivastava and V.K. Pathak, A common fixed point theorem for weakly compatible mappings in symmetric spaces satisfying an integral type contractive condition, Hacettepe Journal of Mathematics and Statistics 39 (2) (2010), 151 – 158. MR2681241.
- 11. H. K. Pathak and Rakesh Tiwari, A Gregus type common fixed-point theorem in normed spaces with Application, **Banach J. of Math. Anal.** 5(1) (2011), 136 147.
- 12. Rakesh Tiwari and S.K. Shrivastava, Common Fixed Points for Weakly Compatible Mappings, **International J. Math. Combinatorics**, 2(2011) 111- 116.
- 13. H. K. Pathak, Rakesh Tiwari and Rosana Rodriguez Lopez, Common fixed Point result in symmetric spaces, **Novi Sad Journal of Mathematics**, 41(2)(2011), 1-15.
- Rakesh Tiwari, S.K. Shrivastava and V. K. Pathak, Non commuting Mappings: Comparison with Examples, Asian J. Math. And Statistics, 5(2) (2012) 65-70. ISSN1994- 5418.
- 15. Rakesh Tiwari, S. K. Shrivastava, V. K. Pathak and Nidhi Sharma, Common fixed point result for weakly compatible mappings, **Boletin de la Asociacion Matematica Venezolana**, XIX, (1) (2012) 47-55.
- 16. H. K. Pathak and Rakesh Tiwari, Common fixed points for weakly compatible mappings and application in dynamic programming, **Italian J. of Pure and Applied Mathematics**, 30(2013) 253-268.
- 17. Savita Gupta and Rakesh Tiwari, Generalization of fixed point theorem of Suzuki type in complete convex space, **Journal of Advances in Mathematics** 10(1), (2015) 3162 3170. ISSN 2347-1921.
- 18. K. C. Deshmukh, Rakesh Tiwari and Savita Gupta, Generalization of fixed point theorem of Suzuki type in complete metric space, **Journal of Progressive Research in Mathematics**, 5(1), (2015) 482-486. ISSN 2395-0218.

- 19. Vinod Kumar Sahu, H. K. Pathak and Rakesh Tiwari "On the convergence results of an explicit iterative scheme for two asymptotically quasi-I-nonexpansive mappings in Banach spaces." Journal of National Academy of Mathematics, 29 (2015).
- 20. Savita Gupta and Rakesh Tiwari, "Common Fixed Point Theorems for Quadruple Mappings satisfying Property E. A using Inequality involving Quadratic Terms", **Journal of Tensor Society of India**, 9 (2015), 35-44. ISSN : 0974-5428.
- 21. Rakesh Tiwari and Savita Gupta, "Some common fixed point theorems in metric spaces satisfying an implicit relation involving quadratic terms", **Functional Analysis, Approximation and Computation** 8 (2) (2016), 45–51.
- 22. M. A. Siddiqui, Rakesh Tiwari, Nandita Gupta and Raksha Rani Agrawal, "A class of modified new Bernstein type operators." **IOSR Journal of Mathematics** 12(5-VIII), (2016), 21-30.
- 23. M. A. Siddiqui, Rakesh Tiwari and Nandita Gupta "Approximation properties of a class of new Szasz-Mirakyan type operators based on q-integers." **Journal of Mathematics Vikram University**, 16(1), 2016.
- 24. Vinod Kumar Sahu, H. K. Pathak and Rakesh Tiwari "Convergence theorems for new iteration scheme and comparison results." **The Aligarh Bulletin of Mathematics**. 35(1-2) (2016), 15-38. ISSN: 0304-9787.
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- M. A. Siddiqui, Rakesh Tiwari and Nandita Gupta "A Schurer type generalization of Szasz-Mirakyan type operators." The Aligarh Bulletin of Mathematics 35(1-2) (2016), 55- 67. ISSN: 0304-9787.
- 27. M. A Siddiqui1, Rakesh Tiwari & Nandita Gupta, "(p, q)-Generalization of Szasz-Schurer operators", **GANITA**, 67(2), (2017), 205-216.
- 28. Rakesh Tiwari, Savita Gupta, and Shobha Rani, "Common fixed-point theorem for quadruple of self mappings satisfying weak conditions and applications. "Asian Journal of Mathematics and Applications, (2017), Article ID ama0384, 9 pages. ISSN 2307-7743.

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- Rakesh Tiwari, Sudhir Kumar Srivastava and Shraddha Rajput, "Fixed point theorem on fuzzy metric spaces with rational inequality and its applications", International Journal of Research in Engineering and Science (IJRES), 8 (3) Ser. I (2020), 50-56. ISSN (Online): 2320-9364, ISSN (Print): 2320-9356.
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- 32. Rakesh Tiwari, Sudhir Kumar Srivastava, Savita Gupta and Shobha Rani, "Gregus type common fixed point theorems in b-metric space with application", **International Journal of Mathematics Trends & Technology**, 66(7) 2020, 112-120. ISSN:2231-5373, <u>www.ijmttjournal.org</u>.
- 33. Rakesh Tiwari , S. K. Shrivastava and Shashi Thakur, "Common fixed point theorems of quadruple mappings satisfying CLR property in G_p metric spaces with applications", **Communications in Mathematics and Applications**, 11(3) (2020), 297-309. ISSN (Print) : 0976-5905 ISSN (Online) : 0975-8607
- Rakesh Tiwari, S. K. Shrivastava and Shobha Rani, "Common fixed point theorems for weakly compatible mappings satisfying CLR property on Partial metric spaces", South East Asian J. of Mathematics and Mathematical Sciences, 16(3) (2020), 361-372. ISSN (Online): 2582-0850. ISSN (Print): 0972-7752
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- 37. Rosana Rodríguez-López1 and Rakesh Tiwari, Fixed point theorems via Generalized WF-Contractions with applications, **SeMA Journal** <u>https://doi.org/10.1007/s40324-021-00261-2</u>.

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- 41.Rakesh Tiwari and Shraddha Rajput, Fixed point theorems for $(\psi \phi)$ contractions in G-fuzzy metric spaces, **International Journal of Computational and Applied Mathematics**,17(1) (2022), 1 - 11.
- 42. Rakesh Tiwari, Shashi Thakur and Andreea Fulga, Common fixed point theorem for C-class functions in complete metric spaces with application, **Filomat** 36:17(2022), 5821-5834.
- 43. Rakesh Tiwari and Shraddha Rajput, A new fixed point result in bipolar controlled fuzzy metric spaces with application, **Malaya Journal of Mathematik**,10(03)(2022), 224 236. DOI : 10.26637/mjm1003/005.
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- 46. Rakesh Tiwari, Rako[°]cevi[′]c V. and Shraddha Rajput, Fixed point result in controlled fuzzy metric spaces with application to dynamic market equilibrium, Kybernetika, 58 (3) (2022), 335 353. DOI: 10.14736/kyb-2022-3-0335.
- Rakesh Tiwari, M. S. Khan and Shobha Rani, Fixed point theorem in partial b- metric space applied to Quantum Operations" Vojnotehnič Glasnik / Military Technical Courier, 70 (3), 2022.

- 48.Rakesh Tiwari, Rako^ccevi[']c V. and Shraddha Rajput, A new fixed point result in double controlled fuzzy metric space with application, **Annals of Fuzzy Mathematics and Informatics**, 24 (2) (2022), 185 198.
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- 50. Pratik Singh Thakur, Rohit Kumar Verma and Rakesh Tiwari, Operations on multisets and fuzzy multisets, Int. J. Math. And Appl. 11(1) (2023), 41-48. ISSN2347-1557. Online <u>http://ijmaa.in</u>
- 51. Samir Dashputre, Rakesh Tiwari, Jaynendra Shrivas, Approximation of fixed points for (α , β)-generalized hybrid mapping via new three step iteration process, **Int. J. Math. And Appl.** 11 (3) (2023), 141–153. Online: <u>http://ijmaa.in</u>. ISSN: 2347-1557.
- 52. Thakur, P. S., Verma, R. K. and Tiwari, R. Operations on Multisets and Fuzzy Multisets. International Journal of Mathematics And Its Applications, 11(3), (2023). 45–58.
- 53. Samir Dashputre, Rakesh Tiwari, Jaynendra Shrivas, A new iterative algorithm for generalized (α,β)-nonexpansive mapping in CAT(0) space, Adv. Fixed Point Theory, 2023, 13:11 https://doi.org/10.28919/afpt/8084. ISSN: 1927-6303, <u>http://scik.org</u>
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- 57. Samir Dashputre, Rakesh Tiwari, Jaynendra Shrivas, Approximation of fixed points for class of generalized non expansive mappings via new iteration process, Global J. of Pure And Appled Mathematics. 2 (2023), 405–419. Online: <u>https://rpublication.com/gjpam.htm</u> ISSN: 0973-1768.

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- Samir Dashputre, Rakesh Tiwari, Jaynendra Shrivas, Approximation of fixed points for Suzuki's generalized non expansive mapping in CAT(0) space via new Iteration process, South East Asian J. of Mathematics and Mathematical Sciences, 19(3) (2023), 145-160. ISSN (Online): 2582-0850 ISSN (Print): 0972-7752.
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- Rakesh Tiwari and Shraddha Rajput, Fixed point results in tricomplex fuzzy metric spaces with application, International J. of Engineering & Technology, 13 (1) (2024), 48 59.
- 62. Hemant Kumar Saw, Shruti Shukla, Rakesh Tiwari, Stochastic modeling and analysis of a repairable single unit systems. **International Journal of Engineering and Computer Science**, 13(1), January (2024),25991-26000. ISSN: 2319-7242 DOI: 10.18535/ijecs/v13i01.4785.www.ijecs.in.
- 63. Rakesh Tiwari, Rajesh Patel, A new fixed point theorem in b-metric space with application, **International Research J. of Advanced Engineering & Management**, 2 April (2024), 906-912. DOI: 10.47392/irjaem/2024.0120. e ISSN 2584-2854.
- 64. Rakesh Tiwari, Nidhi Sharma, Fixed points theorems for generalized (A –Φ)- Meir-Keeler Gregus quadratic type hybrid contraction mappings via simulation function in b-metric spaces, Adv. Fixed Point Theory, 14:26 (2024), 1-22, https://doi.org/10.28919/afpt/8602 ISSN: 1927-6303.
- 65. Hemant Kumar Saw, Rakesh Tiwari^{*} and Shruti Shukla, Profit analysis of a two- unit similar cold standby system with endurance time and preventive maintenance, International Journal of Statistics and Applied Mathematics, 9(4) (2024), 16-21, ISSN: 2456-1452.
- 66. Leena Rawate, Renuka Sahu, Rakesh Tiwari,* Arun Kumar Mishra, A new fixed point theorem in cone B-metric spaces, Adv. Fixed Point Theory, 14:30 (2024), 1-22, 9 pages, ISSN: 1927-6303. https://doi.org/10.28919/afpt/8602 ISSN: 1927-6303.
- 67. Rakesh Tiwari1and Rajesh Patel, Common Fixed-Point Theorems in Extended

Rectangular b-Metric Spaces, **International Journal of Applied Mathematical Research**, 13 (2) (2024), 74-82.

- 68. Rakesh Tiwari, Nidhi Sharma, A new fixed point theorem for generalized (α ψ) contraction mapping of quadratic type with application, Communications in Mathematics and Applications, 15(1) (2024), 1-17, DOI : 10.26713/cma.v15i.1.2557, ISSN: 0975- 8607 (online), ISSN: 0976- 5905(print).
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- 70. Thakur, P. S., Verma, R. K. and Tiwari, R. Feature reduction in multiple linear regression via bivariate correlation coefficients. Iran J Comput Sci (2024). https://doi.org/10.1007/s42044-024-00206-8.
- 71. Leena Rawate, Rakesh Tiwari* and Arun Kumar Mishra, Common fixed point theorem for Lipschitz type mapping, International Journal of Mathematics and its Applications. 12(3) (2024), 109-113. ISSN: 2347-1557.
- 72. Rakesh Tiwari, Nidhi Sharma, Fixed points theorems for generalized (α ψ) Contraction Mapping of quadratic type with Applications, Communications in Mathematics and Applications, 15(1) (2024), 1-17, https://doi.org/10.26713/cma.v15/1.2557. ISSN: 0975-8607.
- 73. Rakesh Tiwari, Nidhi Sharma, Andreea Fulga, Rajesh Patel, Fixed point results in controlled fuzzy metric spaces with an application to the conversion of solar energy into electric power, **Adv. Fixed Point Theory**, 15:10 (2025), 1-18. http://scik.org, https://doi.org/10.28919/afpt/9078 ISSN: 1927-6303

Paper Presentation in National / International Conferences (15)

- 1. Fixed point theorem and coincidence point, National seminar on recent trends in mathematics and its applications, Govt. PG. College, Dhamtari (C.G.), Oct. 24-26 (2004).
- 2. Fixed point theorems for expansion mappings, 70th annual conference of Indian Mathematical Society, J. N. V. Univ., Jodhpur (Rajasthan), Dec. 26- 29 (2004).
- 3. Common fixed point theorems for expansion mappings satisfying implicit relation, 71st annual conference of Indian Mathematical Society, I. I. T. Roorkee (Uttaranchal), Dec. 26- 29 (2005).
- 4. A common fixed point theorem for pair of weakly compatible mappings, Annual

conference of Bharata Ganita Parisad and Deptt. of Math. and Astronomy, Lucknow Univ. Lucknow (U.P.), Nov. 18-19 (2006).

- 5. A common fixed point theorem for weakly compatible mappings, XII Annual conference of **BHU**, **Banaras** (U.P.), Dec. 15-16 (2006).
- 6. A common fixed point theorem in symmetric spaces satisfying an integral type contractive condition, 72nd annual conference of Indian Mathematical Society, **RDVV**, Jabalpur (M.P.), Dec. 27-30 (2006).
- 7. Common fixed points for pair of weak compatible mappings satisfying a common (E.A) property and a generalized Phi -contractive conditions, National conference on Recent Trends of Mathematics in Science & Technology, **B.I.T., Durg (C.G.)**, March 16-17 (2007).
- 8. A Gregus type common fixed point theorem in normed spaces with Application, International Conference on Mathematical Sciences, National University of Malaysia, November 28-29(2007).
- 9. Application of Fixed point theorem in geometry, Application of Tensors & Diff. Geometry, **SRMCEM Lucknow** (U. P.), Jul. 5- 6 (2008).
- 10.Fixed point theorem with Asymptotic Regularity Condition, National conference on Recent Trends in Mathematics and Statistics, Govt. J. Yoganandam Chhattisgarh College, Raipur (C.G.), Jan. 23-24 (2009).
- 11.On some common fixed point theorems of Pathak, National conference on Recent Trends in Pure & Applied Mathematics, **Deen Dayal Upadhyay Gorakhpur Univ.**, **Gorakhpur (U.P.)**, July, 11-12 (2009).
- 12. Some recent results on common fixed point theorems, 14th International conference (CONIAPS XIV) on Physical Sciences Interface with Humanity, **S. V. National Institute of Technology, Surat (Gujarat)**, Dec. 22-24 (2011).
- 13. The great contributions of Indian Mathematicians, National Workshop on Different aspects of Mathematics, **Dr. K. C. B. Govt. PG. College, Bhilai-3, Durg (C.G.)**, Dec. 21 (2012).
- 14.Common fixed point theorem for Weakly Compatible mappings Satisfying CLR Property, International E-Conference on Nonlinear Analysis & its Applications, Dayanand Science College, Latur (Maharashtra), July 27-29 (2020).
- 15.A Coupled Common Fixed Point Theorem for Quadrupal Mappings in Dislocated Metric Space, International Conference on Role of Applied Sciences in Social Implications (IC-RASSI), Govt. Digvijay Autonomous PG College, Rajanandgaon, (C.G.), 6-8th February, 2023.

Participation in National / International Conferences (7)

1. National Conference on Functional Analysis, Govt. Chhattisgarh PG. Auto. College, Raipur (C.G.), Jan. 28-29 (1997).

- 2. National Seminar on Social Change in India, Govt. Arts & Science PG. Auto. College, Durg (C.G.), March 10-11 (2000).
- 3. National Science Day 2006 Seminar sponsored by C.G. Council of Science & Technology on 27th April 2006 at Govt. V. Y. T. PG. Autonomous College, Durg (C.G.).
- 4. International Conference on Vedic Science & its Applications, Organized by Chhattisgarh Vigyan Bhartiya Peeth Parishad, Puri on Nov. 20 -21, 2010 at **Pt. Ravishankar University, Raipur (C.G.).**
- 5. National Webinar on COVID 19 and its Impact on Indian Economy organized by Department of Economics, Govt. V.Y.T. PG. Autonomous College, Durg (C.G.) on June 4, 2020.
- 6. National Webinar on Recent Trends in Mathematics, organized by Departmentof Mathematics, Govt. Holkar (Model Autonomous) Science College, Indore (M.P.) on June 11, 2020.
- National Webinar on Prospects & Challenges for Future NAAC Accreditations in Colleges, organized by IQAC, Govt. V.Y.T. PG. Autonomous College, Durg (C.G.) on June 14, 2020.

Participation in Workshops (7)

- 1. "Application of Mathematics in Engineering and Technology" (WAMET- 2008) Organized by M P Christian College of Engineering & Technology, 11th Jan 2008.
- 2. State level workshop on "**Mathematics Olympiad for Co-ordinators**", Sponsored by CCOST, Raipur, Organized by Govt. Bilasa Girls College, Bilaspur (C.G.), Jan. 24-26, 2011.
- 3. National workshop "**Applications of Mathematics in Different Fields of Sciences on Mathematics**", Sponsored by UGC, Organized by Govt. Nagarjun PG. College, Raipur (C.G.), Oct. 12-14, 2012.
- 4. National workshop "Quality enhancement through innovations in teaching learning", evaluation and implementation of healthy practices, Sponsored by NAAC, Bangaluru, Govt. V.Y.T. PG. College, Durg (C.G.), Feb. 8-9, 2013.
- 5. Online FDP on "Online Education: Boon for Upliftment of Higher Education Institutes", Jointly Organized by Hemchand Yadav University & Govt. V.Y.T. PG. College, Durg (C.G.) July 22-31, 2020.
- 6. Online FDP on "**Teaching Mathematics Effectively in Online Mode: Various ICT Tools & Software**", Organized by Tech Edu Teacher, VIT Vellore Aug. 9,2020.
- 7. International E-Faculty Development Programme on Fixed Point Theorems & its Applications, Organized by The School of Basic Sciences, Manipal University, Jaipur on Sept. 15 -19, 2020.

<u>Chairman (4)</u>

- 1. Conference of The Tensor Society on Application of Tensors & Diff. Geometry, SRMCEM, Lucknow (U. P.), Jul. 5- 6 (2008).
- 2. National Seminar on "**Emerging Areas in Pure & Applied Mathematics**", Kalyan PG College, Bhilai Nagar (C. G.), Nov. 25- 26 (2011).
- National Conference on "Education and Research Scenario of Mathematical and Computer Sciences", S. P. A. S. Mahavidyalaya, Nawapara Nagar, Raipur (C.G.), Jan. 29-30, 2013.
- 4. 27th International Conference of International Academy of Physical Sciences (**CONIAPS XXVII**) on Functional & Numerical Analysis, Pt. Ravishankar Shukla University Raipur (C.G.), Oct. 26-28, 2021.

Organizing Secretary (15)

- 1. National Conference on "Establishing kinship between Mathematical Sciences & Society" (NCKMS 09), Sponsored by U.G.C., C.S.I.R. & Department of Higher Education Govt. of C. G. Oct. 30-31 2009
- 2. National Workshop on "Recent Trends in Graph Theory & Cryptography" (NWRGC 11), Sponsored by University Grants Commission (U.G.C.), Chhattisgarh Council of Science & Technology (COST) & Department of Higher Education Govt. of C. G. Oct. 11-13, 2011.
- 3. **State level Workshop** on "Mathematical Olympiad for Coordinators", Sponsored by Chhattisgarh Council of Science & Technology (COST) & National Board for Higher Mathematics (NBHM) Jan. 18-21, 2012.
- National Seminar on "The Rich Heritage of Mathematics in India" (NSRHMI 12) Sponsored by Chhattisgarh Council of Science & Technology (COST) Oct. 26- 27, 2012.
- 5. **State level Workshop** on "Mathematical Olympiad for Coordinators", Sponsored by Chhattisgarh Council of Science & Technology (COST) Dec. 27, 2015.
- 6. **National Workshop** on "Madhava Mathematics Competitions" (NWMMC 15), Sponsored by Chhattisgarh Council of Science & Technology (COST) Dec. 27, 2015.
- 7. **State level Workshop** on "Regional Mathematical Olympiad", Sponsored by Chhattisgarh Council of Science & Technology (COST) October 2, 2018.
- 8. **State level Workshop** on "Indian National Mathematical Olympiad for RMO Awardees of C.G.", Sponsored by Chhattisgarh Council of Science & Technology (COST) January 10-13, 2019.
- 9. National Mathematics Day Celebration, Organized by Govt. V.Y.T. PG. College, Durg (C.G.) in Collaboration with Govt. Madhav Science College, Ujjain (M. P.) and Institute of Excellence in Higher Education, Bhopal (M.P.) on Dec. 29, 2020.

- 10. National Webinar on Challenges & Concerns Related in the Field of Sports, Organized by Govt. V.Y.T. PG. Autonomous College, Durg (C.G.) on March 13, 2021.
- 11.**National Mathematics Day Celebration,** Organized by Govt. V.Y.T. PG. Autonomous College, Durg (C.G.) Catalyzed by Chhattisgarh Council of Science & Technology (CCOST) and National Council for Science & Communication (NCSTC), DST, Govt. of India, New Delhi on Dec. 29, 2021.
- 12. National Mathematics Day Celebration, (Online) Organized by Govt. V.Y.T. PG. Autonomous College, Durg (C.G.) Catalyzed by Chhattisgarh Council of Science & Technology (CCOST) and National Council for Science & Communication (NCSTC), DST, Govt. of India, New Delhi in association with Govt. Madhav Science College, Ujjain (M. P.), Institute of Excellence in Higher Education, Bhopal (M.P.), Bastar University, Jagdalpur (C.G.) and Bhilai Institute of Technology, Durg (C.G.) on April 13, 2022.
- 13.National e-Workshop for NET / SLET Aspirants (NeWNA-23), Organized by Govt. V.Y.T. PG. Autonomous College, Durg (C.G.) Sponsored by Rashtriya Uchchatar Shiksha Abhiyan (RUSA) in collaboration with Govt. Madhav Science College, Ujjain (M. P.), Institute of Excellence in Higher Education, Bhopal (M.P.), Bastar University, Jagdalpur (C.G.) and Bhilai Institute of Technology, Durg (C.G.) March 13-18, 2023.
- 14. National Mathematics Day Celebration, (Online) Organized by Govt. V.Y.T. PG. Autonomous College, Durg (C.G.) Catalyzed by Chhattisgarh Council of Science & Technology (CCOST) and National Council for Science & Communication (NCSTC), DST, Govt. of India, New Delhi on March 20, 2023.
- 15. Workshop on "MATLAB: Applications in Sciences, Sponsored by Rashtriya Uchchatar Shiksha Abhiyan (RUSA) in collaboration with Bhilai Institute of Technology, Durg (C.G.) July 06-10, 2023.

Invited Talk (21)

- 1. A Common Fixed-Point Theorem Satisfying Implicit Relations, A.I.C.T.E. Sponsored National Seminar on Modern Trends in Applied Mathematics Towards the Application of Fuzzy Logic, 8-9 July, 2010, Organized by Bhilai Institute of Technology, Durg (C.G.).
- 2. Research Paper writing in Latex, U.G.C. Sponsored National Workshop in Mathematics on Emerging Areas of Applications of Mathematics, organized by Dept. Of Applied Mathematics, B.C.S. Govt. P.G. College, Dhamtari (C.G.). October 26-28, 2010,
- 3. Common Fixed Point Theorems & Its Applications, U.G.C. Sponsored National Seminar on "Emerging Areas in Pure & Applied Mathematics", Kalyan PG College, Bhilai Nagar (C. G.), Nov. 25- 26, 2011.

- 4. A Comparative view of ancient mathematics, National Symposia on "History of Indian Mathematics, Sponsored by MPCOST. J. H. Govt. PG. College, Betul (M.P.), Dec. 22-23, 2012.
- **5**. **Fuzzzy Logic**, National Workshop on Fuzzy Sets & Its Application & General Mathematics, **Govt. J.Y. Chhattisgarh College Raipur** (C.G.), 17-19 Jan. 2013.
- 6. Kerala School of Mathematics, National Workshop On Recent Development In Mathematics & Its Application In Various Field, St. Thomos College Bhilai (C.G.), Jan. 21-22, 2013.
- 7. Scope of Mathematics, National Conference on Education and Research Scenario of Mathematical and Computer Sciences, S. P. A. S. Mahavidyalaya, Nawapara Nagar, Raipur (C.G.), Jan. 29-30, 2013.
- 8. A research tool: Latex, National Workshop Sponsored by MPCOST, Govt. Digvijay PG. College, Rajnandgaon (C.G.), Feb. 20-21, 2013.
- Fixed Point Theorems, A.I.C.T.E. Sponsored National Seminar on Application of Mathematical Modeling in Science & Technology, Bhilai Institute of Technoogy, Durg (C.G.).15- 16 March, 2013,
- 10. Crypto-arithmetic Problems, State level Workshop Sponsored by CCOST, Govt. Kaktiya PG. College, Jagadalpur (C.G.), Dec. 14, 2018.
- 11. Ramanujan and his Contributions, State level Workshop on Recent Advances in Mathematics and their Applications Sponsored by CCOST, NCSTC, DST, Govt. of India, Govt. Kamladevi Rathi Girls PG. College, Rajnandgaon (C.G.), Dec. 21, 2018.
- 12. Worldwide views on Ramanujan The Great Indian Mathematician, State level Workshop on "National Mathematics Day Celebration" Sponsored by CCOST, Organized by Govt. V. Y. T. PG. College, Durg (C.G.), Dec. 21-22, 2018.
- 13. National Webinar on Life & Work of Srinivasa Ramanujan, Sponsored by CCOST, Organized by Bastar Vishwavidyalaya, Jagdalpur (C.G.), June 27, 2020.
- 14. Webinar on **RMO Virtual Class**, Sponsored by CCOST, Organized by **Bastar Vishwavidyalaya**, Jagdalpur (C.G.), July 30-31, 2020.
- 15. Some Applications of Ramanujan's Findings, National Workshop and Mathematics Quiz on the National Mathematics Day Celebration, Organized by Government Kamladevi Rathi Girls Postgraduate College Rajnandgaon(C.G.) Sponsored by Chhattisgarh Council of Science and Technology and National Council for Science and Communication (NCSTC) DST, Govt. of India. December 21, 2021.
- 16. Some Applications of Ramanujan's Work, National Webinar on Advances in Pure and Applied Mathematical Sciences. Institute for Excellence in Higher Education, Bhopal (M.P.), Sponsored by: Department of Higher Education, Govt of M.P.15th March 2023 Under the scheme of MPHEQIP.
- 17. Ramanujan's Contribution to the World, Celebration of National Mathematics Day, Government Digvijay Autonomous PG College, Rajnandgaon (C.G.),

Sponsored by Chhattisgarh Council of Science & Technology (CCOST) and National Council for Science & Communication (NCSTC), DST, Govt. of India, New Delhi.

- 18. Ramanujan's Philanthropy to the World, National Workshop on Emerging Trends in Mathematics & Mathrmatical Quiz on the National Mathematics Day Celebration 2023, Organized by Government Kamladevi Rathi Girls Postgraduate College Rajnandgaon(C.G.) Sponsored by Chhattisgarh Council of Science and Technology and National Council for Science and Technology Communication (NCSTC) DST, Govt. of India. January 15, 2024.
- 19. A Sparkling Gem of Indian Knowledge System: Srinivas Ramanujan, National Seminar on Mathematics in the Indian Knowledge System, Organized by Government J. S. T. PG. College, Balaghat (M.P.) Sponsored by Madhya Pradesh Council of Science and Technology (MPCOST). 18-19 December, 2024.
- 20. **Keynote Speaker** on National Mathematics Day Celebration 2024, Organized by A.P.S.G.M.N.S. **Government Postgraduate College, Kawardha (C.G.)** Sponsored by Chhattisgarh Council of Science and Technology (C-COST) and National Council for Science and Technology Communication (NCSTC) DST, Govt. of India. December 21, 2024.
- 21. Pigeonhole Principle, One Day Problem Solving Workshop for Madhava Mathematics Competition 2025, funded by National Board of Higher Mathematics (NBHM) Mumbai, organized by Dept. Of Mathematics & IT, B.C.S. Govt. P.G. College, Dhamtari (C.G.). January 09, 2025.

<u>Editor</u>

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Fellowship

1. Awarded **Summer Research Fellowship** (SRF - 2011) by Indian Academy of Sciences at Dept. of Mathematics and Statistics, University of Hyderabad, Hyderabad (A.P.) under Prof. V. Kannan.

Research Project

- 1. **Minor Research Project** sponsored by U.G.C. on "Application of Fixed-Point Theorems in Solving Certain Non Linear Equations and Dynamic Programming Problems" (2005-07).
- 2 **Minor Research Project** sponsored by U.G.C. on "Application of Fixed-Point Theorems" (2011-13).

Other

- 1. Attended 78th Annual Meeting of the **Indian Academy of Sciences** held at Wadia Institute of Himalayan Geology, Dehradun (Uttarakhand), 1-4 Nov. 2012.
- 2. Participated in **Pedagogical Training for mathematics Teachers** (PTMT), Sponsored by National Board for higher Mathematics (NBHM) **Bhaskaracharya Pratishthana**, Pune, 5-10 April 2012.

Mathematical Olympiad / Competitions

- 1. Distt. Co-Ordinator, **Regional Mathematical Olympiad** (R M O), Sponsored by Homi Bhabha Center for Science Education (HBCSE), NBHM & CCOST.
- 2. Distt. Convener, **Madhav Mathematics Competitions**, Sponsored by Homi Bhabha Center for Science Education (HBCSE) and NBHM.
- 3. Deputy Co-ordinator State Regional Mathematics Olympiad (C.G.).

Life Memberships

- 1. Indian Mathematical Society (IMS).
- 2. Bharat Ganita Parishad.
- 3. International Academy of Physical Sciences.