

Faculty Profile: Dr. Sandeep Bhatt Department of Mathematics Ram Lal Anand College, University of Delhi



Title	Dr.	First Name	Sandeep	Last Name	Bhatt	Photograph
Designation		Assistant Professor				
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Mobile		+91 9873626870				
Email		Sandeepbhatt.maths@rla.du.ac.in				
Institutional Web page		https://mjrishi.github.io/resume-site-2/sandeep_bhatt_cv				
Google Scholar		https://scholar.google.com/citat-ions?user=io50SEwAAAAJ&hl=en				
Research Gate		https://www.researchgate.net/profile/Sandeep-Bhatt-5				
ORCID ID		https://orcid.org/0009-0005-5040-3881				
Scopus ID						
Researcher ID						
Vidwan ID		393360				
Educational Qualifications						
Degree			Insti	itution		Year
Ph.D.		Department of Mathematics, University of Delhi				2022
M.Sc.		Sri Venkateswara College, University of Delhi				2014
B.Sc.		Moti Lal Nehru College, University of Delhi				2012
12		VVMIC- Lohaghat, Uttarakhand				2009
10		VHSVM- Lohaghat, Uttarakhand				2007

Career Profile

1. Assistant Professor (Permanent), Department of Mathematics, Ram Lal Anand College (June 2023-Till Date)

2. Assistant Professor (Ad-hoc), Department of Mathematics, Ram Lal Anand College (August 2019-June 2023)

3. Assistant Professor (Ad-hoc), Department of Mathematics, Kalindi College (January 2019- April 2019)

4. Assistant Professor (Guest), Department of Mathematics, Sri Venkateswara College (September 2018- November 2018)

Administrative Assignments

- 1. Convenor, Timetable Committee, Ram Lal Anand College (2024-2025)
- 2. Convenor, ERP Committee, Ram Lal Anand College (2023-2025)
- 3. Nodal Officer, Samarth e-Gov, Ram Lal Anand College (2024-2025)
- 4. Teacher-in-Charge, Department of Mathematics, Ram Lal Anand College (2021-2022, 2024-2025)
- 5. Co-convenor, Timetable Committee, Ram Lal Anand College (2022-2024)
- 6. Member, Timetable Committee, Ram Lal Anand College (2021-2022)
- 7. Member, Infrastructure and High-Powered Purchase Committee, Ram Lal Anand College (2024-2025)
- 8. Member, Career Counselling and Placement Cell, Ram Lal Anand College (2022-2024)
- 9. Member, Student's Union Advisory Committee, Ram Lal Anand College (2020-2021, 2022-2023)
- 10. Member, College Website Committee, Ram Lal Anand College (2021-2022)
- 11. Member, Discipline cum Anti-ragging Committee, Ram Lal Anand College (2020-2021, 2023-2024)
- 12. Member, Laptop Distribution Committee, Ram Lal Anand College (2019-2020)
- 13. Member, Sangoshthi Committee, Ram Lal Anand College (2019-2020)

Areas of Interest / Specialization

Numerical Analysis, Real Analysis, Linear Algebra, Group Theory

Subjects Taught

Real Analysis, Calculus, Group Theory, Ring Theory, Differential Equation, Linear Algebra, Numerical Analysis, Bio-Mathematics, LaTeX, Graph Theory, Probability and Statistics

Research Guidance

NA

Publications Profile

Patents:

Papers:

1. Bhatt, Sandeep; Singh Swarn, and Singh, Suruchi. "Approximate Solution of Fourth Order **Parabolic Equation using Splines**". Palestine Journal of Mathematics, 12 (Special Issue), pp. 119-131, (2023) ISSN 2219-5688.

2. Singh, Swarn; Bhatt, Sandeep and Singh, Suruchi. "**Cubic B-spline collocation method on non-uniform mesh for solving non-linear parabolic partial differential equation**". Computational Methods for Differential Equations, 10(1), pp. 28-43 (2022)

3. Singh, Suruchi; Singh, Swarn; and Bhatt, Sandeep. "**High order compact cubic B-spline collocation method for the solution of Fisher's equation**". International Journal of Applied and Computational Mathematics, 7, 217 (2021) <u>https://doi.org/10.1007/s40819-021-01157-5</u>

4. Singh, Swarn; Singh, Suruchi and Bhatt, Sandeep. "**Optimal cubic spline method for convection-diffusion equation**". J. Math. Comput. Sci. 11, no. 4, 2021.

Chapters in books and e-chapters (Published)

1. **Topics in Calculus**, (4 Book chapters), Published by: Department of Distance and Continuing Education, University of Delhi, 1st edition 2022, ISBN:978-93-95774-36-9

2. Introduction to Graph Theory (2 Book Chapters), Published by: Department of Distance and Continuing Education, University of Delhi, 1st edition 2024, ISBN: 978-81-19417-83-4

Conference Organization/ Presentations

Events Organized:

- 1. **"Outreach Program on Vedic Mathematics**" at Inter-Colleges of Patiya Village Cluster in Almora District from 12-11-2024 till 16-11-2024.
- 2. Alumni Talk on "A Dynamic Career in Game Design" at Ram Lal Anand College on 18-10-2024.
- 3. Alumni Talk on "Navigating the Mathematical Route to Data Science" at Ram Lal Anand College on 03-11-2023.
- 4. Webinar on "Applications of Number Theory" (Co-convenor) at Ram Lal Anand College on 19-03-2023.
- 5. Certificate Course on "**Python for Data Science**" (Convenor) at Ram Lal Anand College from 24-09-2022 till 12-11-2022.
- 6. Webinar on "**Some Concepts from Linear Algebra**" (Co-convenor) at Ram Lal Anand College on 06-03-2022.
- 7. Webinar on "Mathematics Behind Investment Decision Making" (Convenor) at Ram Lal Anand College on 08-01-2022.
- 8. Webinar on "Introduction to Data Science" (Convenor) at Ram Lal Anand College on 24-07-2021.

Invited Talks, Resource person, invited Chairperson, Conference Paper presentations (Oral):

1. Resource person for an online One-week FDP on "**Research Writing & Mathematical Typesetting with LaTeX**" organized by TLC Ramanujan College in collaboration with Ram Lal Anand College, December 07-13, 2023.

Presentations: International

Presentations: National

Internships Conducted:

Research Projects (Major Grants/Research Collaboration)

NA

Awards and Distinctions

1. University Gold Medalists, M.Sc., University of Delhi (Highest marks in all of M.Sc. courses, 2014)

2. Secured First position in B.Sc.(H) Mathematics in South Campus, University of Delhi (4th in Universit of Delhi, 2012).

3. South Campus Endowment Scholarship for being a Meritorious Student in M.Sc. Mathematics for the period of 2012-2014.

4. Qualified Joint CSIR-UGC test for Junior Research Fellowship and Eligibility for Lectureship (NET in June 2015 (AIR-43).

Association With Professional Bodies

NA

Other Activities

Research

Participations

National:

- 1. Two-day workshop on "ESTABLISHMENT OF MODALITIES FOR SKILL ENHANCEMENT COURSES" organised by Skill Enhancement Course Committee, University of Delhi, March 04-05, 2024
- 2. Ten days "**NEP Orientation and Sensitization Programme**" under UGC-MMTTP, organised by "Center for Professional Development in Higher Education, University of Delhi, December 19-29, 2023.
- 3. Two-week interdisciplinary refresher course in "Advanced Research Methodology" organised by TLC, Ramanujan College, October 23-November 06, 2023.
- 4. Six-day short-term face-to-face training programme on "Indian Knowledge Systems (IKS)", organized by CPHDE in collaboration with UGC and IKS Division, Govt of India, October 16-21, 2023.
- 5. Four-week Faculty Induction/Orientation Programme, organized by TLC, Ramanujan College, July 22-August 20,2023.

- 6. One-week national workshop on "Mathematical Modelling with Simulation in Applied Sciences", organized by the Department of Mathematics, Central University of Haryana May 22-26, 2023.
- 7. One-week faculty development program on **"Data Analysis using R"** organized by Ram Lal Anand College and Ramanujan College, December 12-18, 2022.
- 8. Course Workshop on **"Vedic Mathematics-1"**, organized by Value Addition Committee in collaboration with Hansraj College, October 19, 2022.
- 9. One week (Online) Interdisciplinary Faculty Development Programme on "OPTIMIZATION: The OMNIPRESENT" organized by Motilal Nehru College in collaboration with Hansraj College, University of Delhi, February 04-09, 2022.
- 10. One-week online FDP program on **"Mathematical Analysis and Its Application"**, organized by Vivekanand College in collaboration with Hansraj College, University of Delhi, July 26-31, 2021.
- 11. One-week online FDP on "ICT tools for Effective Teaching Learning", August 05-09, 2020.
- 12. Two-week faculty development program on "Managing Online Classes and Co-creating MOOCS:2.0" organized by TLC, Ramanujan College, University of Delhi, May 18 June 03, 2020.
- 13. "**FDP on R Programming**" organized by BIT Mesra, Noida Campus in association with IIT Bombay, Spoken Tutorial, MHRD, Govt. of India, May 11-15, 2020.
- 14. GIAN course on "Analysis of Nonlinear problems by the Finite Element Method", MNIT Jaipur, December 19-29, 2016.
- 15. May 1, 2020 "Webinar on Graph Theory and Petri Nets Applications" Organized by the Department of Mathematics, SPM College, University of Delhi
- 16. May 28, 2020 "Webinar on Project Based Learning: A Different Way to Explore Engineering" organized by School of Engineering and Technology, Central University of Haryana, Mahendragarh.
- 17. May 27, 2020 "Webinar on Application of Mathematics in Engineering" organized by IIMT College of Engineering, Greater Noida
- 18. May 04-08, 2020 "Webinar series on Quality Assurance in Higher Education: Practices and Issues" organized by Hansraj College, University of Delhi
- 19. April 20, 2020 "Webinar on Referencing and Citation" organized by Aurobindo College(E) and Ram Lal Anand College, University of Delhi
- 20. May 9, 2020 "National Webinar on Transformative Power of Mentoring" organized by SPM College, University of Delhi

Signature of Faculty Member