



Faculty Profile
Ram Lal Anand College, University of Delhi
Accredited by NAAC with A+ Grade
ISO 21001: 2018 and ISO 9001: 2015
NIRF 2025 AI Rank - 90



Title	Dr.	Name	Tanisha	
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Department	Mathematics			
Designation	Assistant Professor			
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Institutional Web page				
Google Scholar ID	https://scholar.google.com/citations?hl=en&user=8QpNei8AAAAJ			
Research Gate ID	https://www.researchgate.net/profile/Tanisha-Chauhan-2?ev=hdr_xprf			
ORCID ID	https://orcid.org/0000-0003-2188-0388			
Scopus ID	57274630000			
Researcher ID	rid169780			
Vidwan ID	https://vidwan.inflibnet.ac.in/profile/734084			
Educational Qualifications				
Degree	Institution			Year
Ph.D Mathematics	Indraprastha Institute of Information Technology, Delhi			2025
M.Sc Mathematics	Indian Institute of Technology, Gandhinagar, Gujarat			2019

B.Sc (Hons.) Mathematics	Miranda House, University of Delhi, Delhi	2017			
Permanent/ Temporary/ Contractual/ Adhoc Teaching Experience					
Designation	Institution	Duration	From	To	Nature
Assistant Professor	Ram Lal Anand College, University of Delhi	23 Days	14.08.2026	Till Date	Permanent
Assistant Professor	Vivekananda Institute of Professional Studies - Technical Campus, GGSIPU	2 Years, 12 Days	01.08.2026	13.08.2026	Regular
Assistant Professor	Arya P.G. College, Panipat, Kurukshetra University	8 Months	16.07.2019	17.03.2020	Contractual
Industry Experience (If any)					
Designation	Company	Duration	From	To	
Research Experience					
Designation	Institution	From	To		
Administrative Assignments					
1. SPOC person of the NBA Team - Department of Computer Science and Applied Mathematics – VSET, VIPS-TC; 2025 2. Program Coordinator of the Department of Computer Science and Applied Mathematics at VIPS-TC; 2026.					
Areas of Interest / Specialisation					
1. Fractional Differential Equations, Viscoelastic Fluids. 2. Direct Numerical Simulations, Spatiotemporal Instability Analysis.					
Subjects Taught					

Probability and Statistics, Discrete Mathematics, Linear Algebra and Calculus, Graph Theory, Topology.
Research Guidance (if any)
Research Projects (Major Grants/Research Collaboration)
Publications
1. D. Bansal, T. Chauhan, S. Sircar; Spatiotemporal linear stability of viscoelastic Saffman–Taylor flows. <i>Physics of Fluids</i>; 34 (10): 104105 (2022) https://doi.org/10.1063/5.0113987. 2. T. Chauhan, D. Bansal, S. Sircar; Spatiotemporal linear stability of viscoelastic subdiffusive channel flows: a fractional calculus framework. <i>Journal of Engineering Mathematics</i> 141, 8 (2023) https://doi.org/10.1007/s10665-023-10282-7. 3. T. Chauhan, M. Bhatt, S. Shrivastava, P. Shukla, and S. Sircar.; Rheodynamics of viscoelastic subdiffusive channel flows: low Weissenberg number regime. <i>Physics of Fluids</i>; 35 (12): 123121 (2023) https://doi.org/10.1063/5.0174598. 4. T. Chauhan, K . Kalyanaraman, S. Sircar; Quantifying macrostructures in viscoelastic subdiffusive flows. <i>Journal of Mathematical Physics</i>; 65 (7): 073101 (2024) https://doi.org/10.1063/5.0195666. 5. D. Ghosh, T. Chauhan, S. Sircar; Implicit-explicit time integration method for fractional advection-reaction-diffusion equations. <i>ANZIAM Journal</i> (2024) https://doi.org/10.1017/S1446181124000154. 6. M. Bhatt, T. Chauhan, R. Agrawal, M. Kumar, V. Kumar, S. Sircar; Elastoinertial stability analysis and structure formation in viscoelastic subdiffusive pipe flow. <i>Physics of Fluids</i>; 36 (12): 123111 (2024). https://doi.org/10.1063/5.0240113.
Patents
Chapters in books and e-chapters (Published)

Conference Organisation/ Presentations
1. Presented an oral presentation on “Spatiotemporal linear stability of viscoelastic subdiffusive channel flows: a fractional calculus framework” at the International Conference on Differential Equations and Control Problems (ICDECP23), organized by the School of Mathematical & Statistical Sciences, Indian Institute of Technology Mandi, India; (June 2023). 2. Presented an oral presentation on “Spatiotemporal linear stability of viscoelastic subdiffusive channel flows: a fractional calculus framework” at the International Conference on Applied Mathematics and Mechanics (ICAMM-2023), organized by the Department of Mathematics, Indian Institute of Technology Indore, India; (October 2023). 3. Presented an oral presentation on “Rheodynamics of viscoelastic subdiffusive channel flows” at International Conference on Mathematics and Applications (ICMA 2024), organized by the Department of Mathematics, Mata Sundari College, University of Delhi, India; (January 2024). 4. Presented a research paper titled "Temporal Stability and Structure Formation in Viscoelastic Subdiffusive Plane Poiseuille Flow: A Parallel Computing Approach" at the International Conference on Mathematics for Sustainable Development and Real-Life Innovations (ICMSDRI-2026), organized by the Department of Mathematics, School of Basic and Applied Sciences, K.R. Mangalam University, Gurugram, Haryana, India; (March 2026). 5. Presented an oral presentation on “Spatiotemporal linear instability of viscoelastic slender jets” at the International Conference on Emerging Horizons in Mathematics & Computation (MatCom–2026), organized by the School of Sciences, Woxsen University, Hyderabad, India; (July 2026).
Awards and Distinctions
1. Awarded Dean’s list for Research and Innovation at IIIT Delhi; 2023. 2. Awarded Institute Silver Medal in M.Sc. Mathematics at IIT Gandhinagar; 2019.
Association With Professional Bodies
Other Activities

1. Participated in the 15-day GIAN workshop on "Interfacial Instability with Industrial Applications" at Indian Institute of Technology, Ropar, India; (July 2022).
2. Participated in the 5-day workshop on " Finite Element Method, Theory and Computation" at IIT Delhi, India; (July 2023).
3. Resource Person in Winter School Certificate Program on Quantitative Aptitude at VIPS-TC; (January 2025).
4. Resource Person in Value Added Course on Computational Mathematics with Applications at VIPS-TC; (July 2025).
5. Attended one-Day Workshop on Nonlinear Dynamical Systems: Theory, Computation, and AI-Driven Approaches organized by the Department of Mathematics, VIT Vellore; (June 2026).
6. Attended the MMTTC 18th Faculty Induction Programme, organised by Jadavpur University for 28 days (July 2025).
7. Passed an 8-week Faculty Development Programme by NPTEL-AICTE on graph theory (Jan-Mar 2026)
8. Attended an FDP on Recent Advances in Artificial Intelligence in Science, Technology, and Management organized by IILM University (June 2026).



Signature of Faculty Member