Curriculum vitae

Name	**:** Dr. Bhanu Pratap Singh
Designation	**:** Assistant Professor (Mathematics)
Institution	**:** M.L.K.(P.G.) College Balrampur, UP-271201
Degree	**:** Ph.D. in Mathematics
University	**:** Banaras Hindu University Varanasi, India
Nationality	**:** Indian
Specialization	**:** Applied Mathematics
Languages	**:** Hindi, English
Marital status	**:** Married
Gender	**:** Male
Address	**:** Village- Ganj, Near Government Hospital, Post- Tambaur, District- Sitapur, State-Uttar Pradesh, Pin code:221005
Mob.	**:** 91 9919479730
E-mail	**:** bpsrathaur@gmail.com
Category	**:** General

Academic Achievements

- Attended SERC School on Atmospheric Chemistry and Air Pollution *2-22* March,2010 at National Physical Laboratory, New Delhi sponsored by Department of Science and Technology, New Delhi
- Paper presented 'Sunshine duration trend during 1983-2000 over Indo Gangetic Plain' at conference of Indian Aerosol Science and Technology Association, Bose Institute Darjeeling Campus, West Bengal during 24-26 March, 2010

- Life time Membership of Indian Aerosol Science and Technology Association
- Life Membership of Indian Meteorological Society (IMS) in 2011
- Attended the Refresher Course on 'Frontiers in Atmospheric Sciences' sponsored by the Indian Academy of Sciences, Indian National Science Academy and the National Academy of Sciences held at the Indian Institute of Tropical Meteorology, Pune during June 14-25, 2010.
- Attended a workshop on Recent Trends in Space Physics, Atmospheric Physics and Astrophysics held at Department of Physics, Banaras Hindu University, Varanasi, India under UGC Networking program during March 12-17,2012
- GATE QUALIFIED– 2015 (GATE SCORE-358 IITK)
- CSIR (NET-JRF) in MATHEMATICAL SCIENCES

Professional Development Programmes

- Orientation Programme (Faculty in Universities/Colleges/Institutes of Higher Education) MINISTRY OF EDUCATION PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING: Teaching Learning Centre Ramanujan College, University of Delhi (22/01/2024 to 20/02/2024)
- Exploring Recent Trends in Applied Mathematics and Machine Learning (FDP): Department of Mathematics, Koneru Lakshmaiah Educational Foundation (Deemed to be University), Bachupally Campus, Hyderabad (20/05/2024 TO 24/04/2024)
- Next Generation Artificial Intelligence (FDP): Department of Artificial Intelligence and Data Science, Department of CSE: Artificial Intelligence and Machine Learning, Department of CSE: Data Science. Vishwakarma Institute of Technology, Pune (11/03/2024 TO 16/03/2024)
- Exploration of Mathematics in Emerging Fields (FDP: Department of Mathematics, PPG College of Arts and Science, Coimbatore (21/02/2024 TO 25/02/2024)
- National Workshop on "Mathematical Tools-SAGE & R: Division of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Chennai (19/12/2022 TO 20/12/2022)
- Workshop on "Introduction to Math Computing using SageMath: Dept of Mathematics, University of Calicut, Kerala (8/12/2022 TO 24/12/2022)
- Short Term Program on "Mathematical Modeling and Computational Software" organised by Hindustan Institute of Technology, Coimbatore, Tamil Nadu (27/03/2023 to 01/04/2023).
- Faculty Development Programmes on "FDP on Emerging Trends of Non-Autonomous System of Differential Equations in Engineering Fields" organised by Division of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Chennai (26/05/2023 to 30/05/2023).

Computer Proficiency

- **Operating System:** Windows XP, Windows7, Windows 8, UNIX, Linux
- **Graphics Software:** GrADS

Area of interest

- Aerosols and its modelling impact
- Climate Modeling
- Fuzzy time series forecasting
- Radiation Budget
- Agricultural Meteorology

Academic Profile

year	Degree	Name Of Institution	University/Board
2015	Ph.D.	Banaras Hindu University	Banaras Hindu University
2009	M.Sc.	P.P.N.P.G. College Kanpur	C.S.J.M. University, Kanpur
2006	B.Sc.	B.S.N.V. (P.G.) College, Lucknow	University of Lucknow
2003	XII	Lucknow Public School, Jail Road, Lucknow	U.P Board
2001	X	S.P.H.S. School, Tambour Sitapur	U.P Board

Relevant Subjects Studies

- Differential and Integral Equation
- Numerical Analysis
- Advanced Complex Analysis
- Differential Calculus and Integral Calculus
- Advance Dynamic Meteorology
- Lebesgue Integration Theory
- Numerical Weather Prediction
- Aerosol and its Radiative Properties

Published Papers in Refereed Journals

1. Srivastava, S. K., M. K. Srivastava, A. Saha, S. Tiwari, S. Singh, U. C. Dumka, **B. P. Singh,** and N. P. Singh. "Aerosol optical properties over Delhi and Manora Peak during a rare dust event in early April 2005." *International Journal of Remote Sensing* 32, no. 23 (2011): 7939-7954. (10.1080/01431161.2010.523732) (SCI, Scopus)

2. **Singh, B. P.,** A. K. Srivastava, S. Tiwari, S. Singh, R. K. Singh, D. S. Bisht, D. M. Lal, A. K. Singh, R. K. Mall, and Manoj K. Srivastava. "Radiative impact of fireworks at a tropical Indian location: A case study." *Advances in Meteorology* 2014, no. 1 (2014): 197072. (10.1155/2014/197072) (SCI, Scopus)

3. Singh, A. K., M. K. Srivastava, Meenakshi Singh, A. K. Srivastava, S. Tiwari, **B. P. Singh**, and D. S. Bisht. "Characterisation of atmospheric aerosol by SEM-EDX and Ion-chromatography techniques for eastern Indo-Gangetic plain location, Varanasi, India." (2014).

4. **Singh, Bhanu Pratap,** Rinku, Abhishekh, Anil Kumar Nishad, and Vijay Kumar Patel. "A modified weighted model of annual rainfall forecasting using fuzzy time series techniques." *Life Cycle Reliability and Safety Engineering* (2025): 1-11.(DOI: https://doi.org/10.1007/s41872-025-00350-5) (Scopus)

5. Mishra, Abhishek, Laxmi Rathour, Bhanu Pratap Singh, and Vishnu Narayan Mishra. "Trigonometric approximation of bivariate periodic Hölder class functions by double sub-matrix means." In *AIP Conference Proceedings*, vol. 3005, no. 1, p. 020032. AIP Publishing LLC, 2024.(DOI: 10.1063/5.0210586) (Scopus)

6. **Singh, B. P.,** S. Tiwari, Philip K. Hopke, R. S. Singh, D. S. Bisht, A. K. Srivastava, R. K. Singh et al. "Seasonal inhomogeneity of soot particles over the central Indo-Gangetic Plains, India: Influence of meteorology." *Journal of Meteorological Research* 29, no. 6 (2015): 935-949.(DOI: 10.1007/s13351-015-5041-7) (SCI, Scopus).

7. Sharma, S. K., T. K. Mandal, D. M. Shenoy, Pratirupa Bardhan, Manoj K. Srivastava, A. Chatterjee, Mohit Saxena, Saraswati, **B. P. Singh**, and S. K. Ghosh. "Variation of stable carbon and nitrogen isotopic composition of PM10 at urban sites of Indo Gangetic Plain (IGP) of India." *Bulletin of environmental contamination and toxicology* 95, no. 5 (2015): 661-669.(10.1007/s00128-015-1660-z) (Scopus)

8. Bisht, D. S., S. Tiwari, A. K. Srivastava, J. V. Singh, **B. P. Singh**, and M. K. Srivastava. "High concentration of acidic species in rainwater at Varanasi in the Indo-Gangetic Plains, India." *Natural Hazards* 75, no. 3 (2015): 2985-3003. (10.1007/s11069-014-1473-0) (SCI, Scopus)

9. Srivastava, M. K., R. K. S. Maurya, **B. P. Singh**, S. K. Srivastava, S. Tiwari, S. Singh, R. K. Mall, L. Narayan, A. K. Srivastava, and S. N. Pandey. "Behavior of sunshine duration over Indo-Gangetic Plain during 1983-2007." (2010).

10. Kushwaha, Abhishek, Sunil Kumar Yadav, and **Bhanu Pratap Singh**. "Kenmotsu manifolds coupled with η-ρ-Einstein soliton admitting extended m-projective curvature tensor." *International Journal of Maps in Mathematics* 8.2 (2025): 516-533. (Scopus) (https://www.simadp.com/journalmim/article/view/287)

Book Chapters:

(1). Cybersecurity in the 21st Century: Bhanu Pratap Singh (Addressing New Challenges in Cybercrimes: Cyber Crime: Issues, Challenges and Security in India): 978-93-94638-52-5 Thanuj International Publishers, Tamil Nadu, India

(2). Clearness Index and its relationship with Aerosol Optical Properties over Northern Indo-Gangetic Plain: Bhanu Pratap Singh and Rinku: Integrative Interdisciplinary Avenues in Biology and Applied Sciences: Perspective to Sustainable Development: 978-1-80433-921-3 Rubicon Publications Editions: 1.

(3). Importance of ICT for Teaching and Learning Mathematics: Bhanu Pratap Singh, Innovation and New Trends in Education (Page. 99-106) (ISBN: 978-93-91791-82-7), Rachnakar Pulishing House Delhi.

(4). Handling the Fully Fuzzy Transportation Issue in a Triangular Fuzzy Environment: Dr. B.P. Singh and Dr. Abhishek Kushwaha, Role of Mathematics in Applied Sciences (Page. 131-142, ISBN-978-81-974468-6-3), Genic Books Publishers PVT. LTD. Agara.

Extracurricular

- Managing to Scientist Meet on Indian Agricultural & Meteorological Forecasting Model "FASAL" held in BHU (2010)
- Managing of "All India Agri Meet" held by IMD in BHU (2011).
- Presentation on "Climate Modeling and its Overview" in Dept. of Geophysics BHU (2013)

Administrative Experience

(1). Member in College Research Expert Committee (01-07-2024 To 30-06-2025)

(2). NAAC (Criterion-5) as member Student support and progression (01-07-2023 To 30-06-2024)

(3). Admission Committee (Science, Math, Physics, Chemistry)

(4). Remedial Coaching Steering Committee (01-07-2023 To 30-06-2024)

(5). Member of Student Welfare Board in Maa Pateswari University, Balrampur, UP (06-06-2025 To 30-06-2026)

(6). Board of Studies Member in Mathematics in Siddharth University, Kapilvastu, Siddharthanagar, UP-222702 (26-09-2024 To 30-96-2025)