




Faculty Details



Title	Dr.	First Name	Suraj Kumar	Last Name	Mallick	Photograph
Designation	Assistant Professor in Geography					
Address	Shaheed Bhagat Singh College, University of Delhi, Sheikh Sarai, Phase-II, New Delhi 110017, India. <u>Shaheed Bhagat Singh College (sbsc.in)</u>					
Date of Birth	03-11-1993					
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Web-Page	<u>Dr. Suraj Kumar Mallick – SHAHEED BHAGAT SINGH COLLEGE (sbsc.in)</u> <u>https://orcid.org/0000-0003-0994-086X</u>					
Educational Qualifications						
Degree	Institution					Year
Post Doc.	Indian Institute of Technology Bombay					2023
Ph.D.	Vidyasagar University					2022
M.Sc	Vidyasagar University					2016
B.Sc (Hons)	University of Kalyani					2014
DCA	JNNYC					2012
Career Profile						
<ul style="list-style-type: none">Assistant Professor at Department of Geography, Shaheed Bhagat Singh College, University of Delhi (April, 2023- till date)Research Associate, Department of Geography, Delhi School of Economics, University of Delhi, New Delhi. (September, 2022 – January, 2023)Contractual Whole Time Teacher (CWTT), Bajkul Milani Mahavidyalaya, Vidyasagar University, Purba Medinipur, West Bengal. (July, 2017 – June, 2018)						
Areas of Interest / Specialization						
<ol style="list-style-type: none">Urban Geography and Regional PlanningRemote Sensing and GISWater Resource ManagementClimate Change Research						
Research Profile						

Google Scholar Link: <https://scholar.google.com/citations?user=-PPZK7MAAAAJ&hl=en>

Research Guidance

Ph.D. Supervision: 2 (Ongoing)

1. **Pragya** (Ph.D. Registration Jan, 2025): “*Assessing Stratospheric Aerosol Injection Impacts on Teleconnections and Southwest Monsoon Variability in the Indo-Gangetic Plain*”
2. **Ritam Sarkar** (Ph.D. Registration July, 2025): “*Assessment of Urbanization-Induced Wetland Shrinkage and Its Sustainable Conservation Strategies in Delhi-NCR*”

Research Articles

1. Tun, K. Z., Pramanik, M., **Mallick, S. K.**, Chakraborty, R., Halder, B., ..., & Zhran, M. (2025). Cooling the Cities: A Comprehensive Review of Urban Heat Island Mitigation Strategies in Southeast Asia. *Human Settlements and Sustainability* 1(2), 91-102.
2. Sahu, N., Kesharwani, R., Das, P., ..., **Mallick, S.K.**, & Mishra, M. M. (2025). Spatiotemporal dynamics of rice cultivation in India. *Tropical Ecology*, 66(1), 152-167.
3. Manna, H., **Mallick, S. K.**, Sarkar, S., & Roy, S. K. (2025). Developing decision making framework on built-up site suitability assessment for urban regeneration in the Industrial cities of Eastern India. *Scientific Reports (Nature)* 15, 5708.
4. Rudra, S., Das, P., **Mallick, S. K.**, Maity, B., Sahu, N., & Khan, U. (2025). Application of geo-spatial and geo-statistical techniques in site suitability analysis for potential urban built-up area development. *Environment, Development and Sustainability*, 1-29.
5. Maity, B., Rudra, S., **Mallick, S. K.**, & Pramanik, M. (2025). Monitoring of Urban Heat Island Intensities and Outdoor Thermal Comfort in an Industrial City: A Study Towards Sustainable Urban Heat Reduction. *Journal of the Indian Society of Remote Sensing*, 1-22.
6. Sahu, N., Nayan, R., Panda, A., Varun, A., Kesharwani, R., Das, P., Kumar, A., **Mallick, S.K.**, Mishra, M.M., Saini, A. and Aggarwal, S.P., 2024. Impact of changes in rainfall and temperature on production of Darjeeling Tea in India. *Atmosphere*, 16(1).
7. **Mallick, S. K.** (2024). Peri-urban interface: challenges and opportunities in spatial planning and management. *Modern Cartography Series*, 11, 529-542.
8. Sahu, N., **Mallick, S. K.**, Das, P., Saini, A., Sayama, T., Varun, A., ... & Thakur, P. K. (2024). Climatic impacts on spring disappearance in the Indian Himalayas. *Geomatics, Natural Hazards and Risk*, 15(1), 2433115.

9. Sarkar, S., **Mallick, S. K.**, Manna, H., & Roy, S. K. (2024). Urbanization-Induced Land Use Dynamics and Its Impacts on Present and Future Urban Ecosystem Services in the Industrial Cities of India. *Earth Systems and Environment*, 1-25.
10. **Mallick, S. K.**, Sahu, N., Das, P., Maity, B., Varun, A., Kumar, A., ... & Rudra, S. (2024). Impact of urban growth in Delhi and It's Peri-urban environment on urban heat exposure. *Urban Climate*, 56, 102010.
11. Abdo, H. G., Vishwakarma, D. K., Alsafadi, K., Bindajam, A. A., Mallick, J., **Mallick, S. K.**, ... & Hysa, A. (2024). GIS-based multi-criteria decision making for delineation of potential groundwater recharge zones for sustainable resource management in the Eastern Mediterranean: a case study. *Applied Water Science*, 14(7), 160.
12. Rane, N. L., **Mallick, S. K.**, Saha, A., Pande, C. B., Rane, J., Roy, R., ... & Radwan, N. (2024). Appraisal on suitable landfill site selection for municipal solid waste disposal using GIS and MIF methods. *Physics and Chemistry of the Earth, Parts A/B/C*, 134, 103591.
13. Sahu, N., Das, P., Ratna, S. B., Saini, A., **Mallick, S. K.**, Kumar, A., & Mohapatra, M. (2024). A bibliometric analysis for Indian summer monsoon variability. *Spatial Information Research*, 1-17.
14. **Mallick, S. K.** (2024). Urban built-up area footprint (UBAF): A novel method of urban bio-capacity and ecological sensitivity assessment. *Journal of Cleaner Production*, 140846.
15. Rane, N. L., Günen, M. A., **Mallick, S. K.**, Rane, J., Pande, C. B., Giduturi, M., ... & Alreshidi, M. A. (2024). GIS-based multi-influencing factor (MIF) application for optimal site selection of solar photovoltaic power plant in Nashik, India. *Environmental Sciences Europe*, 36(1), 5.
16. **Mallick, S. K.**, Rudra, S., & Maity, B. (2022). Land suitability assessment for urban built-up development of a city in the Eastern Himalayan foothills: a study towards urban sustainability. *Environ Dev Sustain*. 1-26.
17. Rane, N. L., Achari, A., Choudhary, S. P., **Mallick, S. K.**, Pande, C. B., Srivastava, A., & Moharir, K. N. (2023). A decision framework for potential dam site selection using GIS, MIF and TOPSIS in Ulhas River basin, India. *Journal of Cleaner Production*, 423,

138890.

18. Sahu, N., Das, P., Saini, A., Varun, A., **Mallick, S. K.**, Nayan, R., ... & Kumar, A. (2023). Analysis of Tea Plantation Suitability Using Geostatistical and Machine Learning Techniques: A Case of Darjeeling Himalaya, India. *Sustainability*, 15(13), 10101.
19. **Mallick, S. K.**, Rudra, S., & Maity, B. (2023). Unplanned urban built-up growth creates problem in human adaptability: Evidence from a growing up city in eastern Himalayan foothills. *Applied Geography*, 150, 102842
20. Maity, B., **Mallick, S. K.**, Das, P., & Rudra, S. (2022). Comparative analysis of groundwater potentiality zone using fuzzy AHP, frequency ratio and Bayesian weights of evidence methods. *Applied Water Science*, 12(4), 63.
21. Maity, B., **Mallick, S.K.** & Rudra, S. (2022). Spatiotemporal dynamics of urban landscape in Asansol municipal corporation, West Bengal, India: a geospatial analysis. *GeoJournal*, 87, 1619–1637.
22. **Mallick, S. K.**, & Rudra, S. (2021). Land use changes and its impact on biophysical environment: Study on a river bank. *The Egyptian Journal of Remote Sensing and Space Science*, 24(3), 1037-1049.
23. Maity, B., **Mallick, S. K.**, & Rudra, S. (2021). Integration of urban expansion with hybrid road transport network development within Haldia Municipality, West Bengal. *The Egyptian Journal of Remote Sensing and Space Science*, 24(3), 471-483.
24. **Mallick, S. K.**, Pramanik, M., Maity, B., Das, P., & Sahana, M. (2021). Plastic waste footprint in the context of COVID-19: reduction challenges and policy recommendations towards sustainable development goals. *Science of the Total Environment*, 796, 148951.
25. **Mallick, S. K.**, Das, P., Maity, B., Rudra, S., Pramanik, M., Pradhan, B., & Sahana, M. (2021). Understanding future urban growth, urban resilience and sustainable development of small cities using prediction-adaptation-resilience (PAR) approach. *Sustainable Cities and Society*, 74, 103196.
26. **Mallick, S. K.** (2021). Prediction-Adaptation-Resilience (PAR) approach-A new pathway towards future resilience and sustainable development of urban landscape. *Geography and Sustainability*, 2(2), 127-133.

27. **Mallick, S. K., & Rudra, S.** (2021). Livelihood and environmental sustainability analysis using aquaculture-based indicators: a study on selected CD blocks of Purba Medinipur District, West Bengal. *Indian Journal of Geography and Environment*, 18, 14-24.
28. **Mallick, S.K., Rudra, S., & Samanta, R.** (2020). Sustainable ecotourism development using SWOT and QSPM approach: A study on Rameswaram, Tamil Nadu. *International Journal of Geoheritage and Parks (Elsevier)*, 8(3):185-193.

Book Chapters in Edited Book

1. Das, P., Rudra, S., Maity, B., **Mallick, S. K.**, Shikary, C., & Sahu, N. (2024). Modelling Urban Growth, Demand–Supply Dynamics, and Climate Resilience: A Study of a Class- I City in Eastern India. In *Cities of Tomorrow: Urban Resilience and Climate Change Preparedness* (pp. 107-130). Springer, Singapore.
2. **Mallick, S.K.,** Maity, B., Das, P., & Rudra, S. (2023). GIS-based groundwater recharge potentiality analysis using frequency ratio and weights of evidence models. In *Case Studies in Geospatial Applications to Groundwater Resources* (pp. 91-108). Elsevier. <https://doi.org/10.1016/B978-0-323-99963-2.00016-X>
3. **Mallick, S.K., & Rudra, S.** (2021). Analysis of Groundwater Potentiality Zones of Siliguri Urban Agglomeration Using GIS-Based Fuzzy-AHP Approach. In: Shit, P.K., Bhunia, G.S., Adhikary, P.P., Dash, C.J. (eds) *Groundwater and Society*. Springer, Cham. https://doi.org/10.1007/978-3-030-64136-8_7
4. **Mallick, S.K.,** Maity, B., & Rudra, S. (2021). Aquaculture-Based Water Quality Assessment and Risk Remediation along the Rasulpur River Belt, West Bengal. In: Shit, P.K., Adhikary, P.P., Sengupta, D. (eds) *Spatial Modeling and Assessment of Environmental Contaminants. Environmental Challenges and Solutions*. Springer, Cham. https://doi.org/10.1007/978-3-030-63422-3_13

Edited Books and Author Books

1. Rane, N., **Mallick, S.K.,** Kaya, O., & Rane, J. (2025). *Applied Machine Learning and Deep Learning: Architectures and Techniques* **Deep Science Publishing** (ISBN No: 978-81-981271-9-8).

2. Rane, N., **Mallick, S.K.**, Eds (2025). *Large Language Models for Sustainable Urban Development* **Springer Nature**. The Springer Series in **Applied Machine Learning** (ISBN No: 978-3-031-86038-6)
3. Rane, N., **Mallick S.K.**, & Rane, J. (2024). *Artificial Intelligence and Machine Learning for Enhancing Resilience* **Deep Science Publishing**. (ISBN No: 978-93-7185-844-1)

Conference/ workshop Organized

1. Member of the Organizing Committee of **ICSSR and Indian Oil-Sponsored International Conference on “Urban Development Missions Restructuring of Spaces and Emergence of New Urbanism”** 15-16th November, 2024 Organized by Shaheed Bhagat Singh College, University of Delhi held on 15-16th November, 2024.
2. Member of the Organizing Committee of **International G20 Conference** entitled “**Resilient Approaches for New World Order & Viksit Bharat**” on 25th September 2023 at Dr. Ambedkar International Centre (DAIC), New Delhi Organized by Shaheed Bhagat Singh College, University of Delhi, New Delhi-110017.
3. Member of the Organizing Committee of National Workshop on Heat Wave 2023 Early Planning and Effective Action: Saving Lives. **Indian Institute of Technology Bombay, National Disaster Management Authority, and Government of India**. 13th - 14th February, 2023.

Awards and Memberships

Young Research Award 2022, Indian Institute of Scholar, Bangalore, India
Life Member of Geographical Society of Himachal Pradesh, Shimla, Himachal Pradesh
Life Member of NAGI, New Delhi, India

Administrative Responsibilities

- 2025- continue: Departmental Representative of Research Cell, Shaheed Bhagat Singh College, University of Delhi.
- 2025-2026: Member of College Website Development Committee, Shaheed Bhagat Singh College, University of Delhi.
- 2024-25: Member of the Central Admissions Committee, Shaheed Bhagat Singh College, University of Delhi.
- 2024 - continue: Nodal officer of Indian Research Information Network System (IRINS), Shaheed Bhagat Singh College, University of Delhi.
- 2024- continue: Time Table Management and Workload Committee, Shaheed Bhagat Singh College, University of Delhi.
- 2023-2024: Convenor of Landscape Magazine Committee, Shaheed Bhagat Singh College, University of Delhi.
- 2023-2024: Member of the Central Admissions Committee, Shaheed Bhagat Singh College, University of Delhi.

Paper presentation/ Invited Lecture/Resource Person

Invited lecture/ Special Guest/ Resource Person

1. **Invited as a Resource Person in State-Level Seminar** entitled “**Sundarbans and Environment**” on 15th June, 2025 Jointly Organized by Purbasha Eco-Helpline Socceity and Department of Geography, Aliah University, Kolkata.
2. **Invited as a Guest Speaker in National Level Workshop** entitled “**Application of GIS**” on 12th June, 2025 organized by Department of Geography and IQAC of Chakdaha College, University of Kalyani, West Bengal.
3. **Invitation for Invited Lecture** entitled “**Life Below Water and SDGs-14**” on 22nd March, 2025 organized by Rotaract Club SBSC, University of Delhi, New Delhi
4. **Invited as Resource Person in ANRF-SERB Sponsored National Conference** entitled “**Towards A Sustainable Future: Climate Change, Clean Energy and Environmental Sustainability**” on 19th-21st March, 2025 organized by Department of Geography and Zoology, Raja Narendra Lal Khan Women’s College (Autonomous), Midnapore-721102, West Bengal.

Paper Presentation and Conference participation

1. Peri-urban interface: challenges and opportunities in spatial Planning Organised by **Shaheed Bhagat Singh College, University of Delhi**, New Delhi on 15-16th November, 2024.
2. Climatic Change and Anthropogenic Impacts on Spring Disappearance in Himachal Pradesh, India at the National Seminar on “Disaster Risk Reduction in the Himalayas: Recent Advancements” organized by the **Centre for the Study of Regional Development, Jawaharlal Nehru University**, New Delhi held on 20-21 September 2024.
3. GIS-based land suitability assessment for urban built-up area development. **International Geographical Union (IGU) Thematic Conference**, 2022 Organized by ICSSR and University of Haryana 24-25th November, 2022.
4. Water Quality Assessment (WQA) of the Newly Emerged Aquaculture Areas of Purba Medinipur District, West Bengal. National Conference on **Geo-spatial Intelligence for Environmental Hazards and Disaster Management** Organized by **Raja N.L. Khan Women’s College (Autonomous)** 5-6th March, 2022.
5. Change monitoring of urban built-up area using CA-Markov method on Siliguri urban area (SUA), India. **International Geographical Union (IGU)**, India, Organized by University of Burdwan, on 6-8th March, 2020.
6. Groundwater Potentiality Zone Analysis Using Fuzzy-AHP Approach on Siliguri Urban

- Area (SUA), India. **51st Annual Seminar of Regional Science Association India (RASi)**, Organized by Amity University on 13th-15th February, 2020.
7. Sustainable ecotourism development using SWOT and QSPM approach: A study on Rameswaram, Tamil Nadu. **UGC-NSQF sponsored One Day International Conference on Smart Tourism and Travel Trade** by Midnapore College (Autonomous) on 10th January, 2020.
 8. Spatio-temporal change analysis of land use and land cover by Geo-spatial techniques. **International Conference on Society and Sustainability: An Interdisciplinary Approach**, Vivekananda College, 12-13th January, 2019.
 9. Landscape Transformation and Its Impact on Livelihood and Environment. International Symposium on Recent Trend in **Agriculture Biodiversity and Social Sustainability (ABSS, 2018)**, 30th Sept-01st Oct, 2018 organized by BSI, Allahabad, India.
 10. Beating Plastic Waste Pollution: Remedies and Recommendations. One Day Seminar on Beat Plastic Pollution for World Environment Day 2018, organized by Regional Centre of **Zoological Survey of India, Ministry of Environment, Forest and Climate Change, Govt. of India** on 5th June, 2018.
 11. A Bio-Geographic View to Assess the Ecological Sensitivity on Dalma Wildlife Sanctuary, East Singbhum, Jharkhand. **UGC-ICSSR Sponsored National Seminar on Contextualising Issues in Applied Geography**, Vidyasagar University, 04-05th March, 2016.

Workshop and Training Courses/FDP/CBP

1. Participated and completed **Faculty Induction Programme (Online FIP)** (Guru Dakshta) organized by **Mahatma Hansraj Malaviya Mission Teacher Training Centre (MH-MMTTC), Hansraj College** under the **Malaviya Mission Teacher Training Programme** from 02 - 28 June, 2025.
2. Participated and completed **Two-week CBP** on organized by the School of Social Sciences at **UGC- Malaviya Mission Teacher Training Centre, UGC-MMTTC JNU, New Delhi** from 30th September to 11th October 2024.
3. Participated and completed **One week FDP on NEP 2020 Orientation & Sensitization Programme** organized by **UGC-Malaviya Mission Teacher Training Centre, UGC-MMTTC JNU** through online mode from 18th March to 28th March, 2024.
4. Participated and completed **One-week FDP on Communication and Presentation Skills in Classroom Teaching** (18-22 December 2023) organized by **University of**

Delhi.

5. Participated in **One Day FDP on NEP 2020: Pedagogical Imperatives of Higher Education** organised by **University of Delhi** held on 1st December, 2023.
6. Participated and completed **Three days Training Programme on “Disaster Response and Preparedness Towards Building Resilient Institution”** jointly organised by **University of Delhi and National Institute of Disaster Management (NIDM)** from 3 April, 2024 to 5 April, 2024.
7. Participated in International G20 Conference on **“Resilient Approaches for New World Order & Viksit Bharat”** at **Dr. Ambedkar International Centre, New Delhi, India** organised by **Shaheed Bhagat Singh College, University of Delhi** held on September 25, 2023.
8. Participated in International Webinar on **“Blue Planet: Environmental Change, Vulnerability and Geopolitics of Ocean”** Organised by **IGI-Young Geomorphologists Forum (IGI-YGF)** held on 8 June, 2023.
9. National Workshop on Heat Wave 2023 Early Planning and Effective Action: Saving Lives. **Indian Institute of Technology Bombay, National Disaster Management Authority, and Government of India.** 13th - 14th February, 2023.
10. Skill Based Creative Tourism Development for Revitalizing the Identities of Local Communities. **Central University of Jammu in Associated with Global Initiative of Academic Networks (GIAN), Government of India.** 18th April, 2022 to 22nd April, 2022.
11. Three Months’ training programme on **Python for GIS and Mapping** (Online Mode), **International Institute of Geospatial Science and Technology (IIGST), India.** 17th July 2021 to 01st November, 2021.
12. Three Days’ Programme on COVID-19 Second Wave and Logistic Supply Chain Management on 11 May 2021 to 13 May 2021 (Online Mode). **National Institute of Disaster Management, Ministry of Home Affairs, Government of India in collaboration with Federation of Indian Chambers of Commerce and Industry, India.**
13. Emerging Challenges for Disaster Risk Reduction, New Strategies and 15th Finance Commission (Online Mode), 27-29th May, 2021. **National Institute of Disaster Management, Ministry of Home Affairs, Government of India in collaboration with Central University of Tamil Nadu, India.**

14. Forest Fires Risk Mitigation and Management in Mizoram (Online Mode), 12th May, 2021. **National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India in collaboration with Centre for Disaster Management Mizoram University, India.**
15. Hospital Management during COVID-19 Surge on 29th April, 2021 (Online Mode). **National Institute of Disaster Management, Ministry of Home Affairs, Government of India.**
16. Improved Climate Change Strategies in Water Resources, 12-18th November, 2018. **Global Initiative of Academic Networks (GIAN), Indian Institute of Technology Kharagpur, India.**
17. Seven Days' Workshop-cum-Hands on Training Programme on Application of ArcGIS Software in Research Methodology, 29th oct-4th Nov, 2018. **The Centre for Environment and Economic Development (CEED), New Delhi, Niti Aayog, Govt. of India.**

Editorial Activities

1. **Editorial Borad member at Deep Science Publishing** (International Book Publisher) Since 2024 <https://deepscienceresearch.com/dsr>

Reviewing Activities in Reputed Journals

1. Science of The Total Environment (ISSN:1879-1026) July, 2021- till date
2. Urban Climate (ISSN:2212-0955) October, 2021 - till date
3. Ecological Indicator (ISSN:1470-160X) August, 2023- till date
4. Environmental Development (ISSN:2211-4645) December, 2022- till date
5. Environment, Development and Sustainability (ISSN: 1573-2975) Dec, 2022-till date
6. Trees, Forests and People (ISSN: 2666-7193) October, 2021- till date
7. Sustainability (ISSN:2071-1050) 2022- till date
8. Energies (ISSN: 1996-1073) 2022- till date
9. Buildings (ISSN:2075-5309) 2022- till date
10. Journal of the Indian Society of Remote Sensing (ISSN: 0255-660X) July, 2023- till date
11. Environmental Monitoring and Assessment (ISSN:1573-2959) December, 2023- till date
12. Ecological Informatics (ISSN: 1574-9541) February, 2024 – till date
13. Scientific Reports (ISSN: 2045-2322) August, 2024- till date

14. Discover Series (Springer) April 2025- till date

15. Scientific African (ISSN: 2468-2276) August, 2025- till date

16. Geo-informatics, Natural Hazards and Risk (ISSN: 1947-5705)- till date

Date: 10/08/2025

Suraj Kumar Mallick

Signature

(Dr. Suraj Kumar Mallick)