Curriculum Vitae

Title	Dr.	First Name	Netrananda	Last Name	Sahu	Photograph
Designation		**Assistant Professor**				
Address		**Department of Geography, Delhi School of Economics, University of Delhi, Delhi 110007**				
Phone No. (Office)		**+91-11-27666491**				
Mobile		**+91-9971485162**				
Email		**babunsahu@gmail.com, nsahu@geography.du.ac.in**				
Web-Page		**https://geography.du.ac.in/People/Faculty-Members/Dr.-Netrananda-Sahu**				

Educational Qualifications

Degree	Institution	Year
Postdoc	**Kyoto University**	**2018-2020**
Ph.D.	**Department of Urban and Environmental Engineering, Kyoto University**	**2012**
M.Phil.	**Department of East Asian Studies, University of Delhi**	**2008**
PG	**Department of Geography, University of Delhi**	**2004**
Any other qualification	**UGC-NET/JRF**	**2005**
Training	Two months from April-May, 2012, Internship Program Young Researcher Overseas Research to **International Research Institute for Climate and Society (IRI), Columbia University, New York.** Under the guidance of Dr. Andrew Robertson, Program is sponsored by GCOE-**ARS** Program, Kyoto University, Japan	**2012**
	Three months from Sept-Nov, 2011, Young Researcher Overseas Trip to International Research Institute for Climate and Society **(IRI), Columbia University**, New York.	**2011**
	Two months Internship from Feb-March, 2010 at **JAMSTEC** under Dr. Swadhin K.Behera,Team	

	Leader, Low-latitude Climate Prediction Research, CVPARP/RIGC, **JAMSTEC**, Yokohama, sponsored by **GCOE-HSE** Program, Kyoto University.Japan. **UNESCO-IHP** Training Course on 'Water Resources and Water-Related Disasters under Climate Change-Prediction, Impact, Assessment and Adaptation' from 29 Nov.-12Dec, 2009 at Disaster Prevention Research Institute (DPRI), Kyoto University, Japan Four Days Training on Remote Sensing-GIS with TNTmips Software for Livelihood of Himachal Pradesh, Department of Geography, Delhi School of Economics, University of Delhi from 18-21 December 2013.	**2010**
Refresher/Orientation	● Two weeks National Inter-disciplinary Refresher Course on "Research Methodology and Data Analysis (Sharpening skills through MS Excel, SPSS, MATLAB & R)" from Teaching Learning Centre, Ramanujan College, University of Delhi, 24th March to 7th April, 2021 ● Three weeks Refresher course from CPDHE, University of Delhi, November 28th to December 19th, 2017. ● One month Orientation Course from 27th April to 25th May 2016 at UGC-HRD, Jamia Milia Islamia	

Career Profile

Organization/Institution	Designation	Duration
Department of Geography, University of Delhi	**Assistant Professor (Permanent)**	**22/02/2014 – Till date**
Department of Geography, University of Delhi	**Assistant Professor (Ad-hoc)**	**02/01/2014 – 20/02/2014**
Swami Shraddhanand College, University of Delhi	**Assistant Professor (Ad-hoc)**	**19/08/2013 – 14/12/2013**
National Institute of Disaster Management, Delhi	**Research Associate**	**15/05/2013-14/08/2013**

Administrative Assignments

Warden: Mansarowar Hostel, University of Delhi w.e.f. 18th April 2024 till date
Past Resident Tutor: Jubilee Hall Hostel, University of Delhi

Areas of Interest / Specialization

Climate change and societal impact, River Hydrology/Hydrometeorology/Climate Variability/ExtremeEvents and Disaster Management

Subjects Taught in 2024-2025

Land Ocean atmosphere interaction/ Environmental Impact Assessment/Statistical Applications in Geography for PG Students
Coursework Paper II for M.Phil/PhD ProgramCoursework Paper III for M.Phil students

Research Guidance

- **Ph.D. Awarded (3)**

1. **Dr. Arpita Panda**
   Thesis Title: Climate Risks and Impact on Agricultural Adaptability in KBK (Kalahandi, Bolangir, Koraput) Districts of Odisha (Awarded in **2021**)

2. **Dr. Atul Saini**
   Thesis Title: Shifting of Monsoon onset and Its Impact on Environment in India (Awarded in **2022**)

3. **Dr. Martand Mani Mishra**
   Thesis Title: Climatic Variability and Vulnerability Assessment of Human Health in Kalahandi District of Odisha (Awarded in **2022**)

- **M.Phil. Awarded (5)**

1. **Mr. Ravi Kesharwani**
   Thesis Title: Climate Variability and Rice Productivity in India: A Spatiotemporal Impact Analysis (Awarded in **2023**)

2. **Mrs. Rashmi Singh**
   Thesis Title: Impact of Climate Variability on Crop Yield in Rajasthan (Awarded in **2018**)

3. **Mr. Rajan Kumar**
   Thesis Title: Seasonal Variability and Predictability of Stream flow: A Case Study of Kosi River Basin (Awarded in **2018**)

4. **Mr. Vipin Chandra Lal**
   Thesis Title: Impact of climate change on migration of birds: A case study of Bharatpur Bird Sanctuary (Awarded in **2018**)

5. **Mr. Madhurya Yadav**
   Thesis Title: Impact of Climate Change on Agriculture: A Case study of South-Eastern Himachal Pradesh (Awarded in **2017**)

Ph.D. Ongoing (4)

Projects Details

Sr. No.	Funding Agency	Title of the Project	Tenure	Cost of the Project (Rs)
1	University of Delhi	Stochastic analysis of intra- seasonal rainfall variability in Himachal Himalaya	2014-2015	100000/-
2	University of Delhi	Impact of the climate change onthe agriculture in the Chamba District of Himachal Pradesh	2015-2016	130000/-
3	Institute of Eminence, University of Delhi	Impact of climatic variability on the vector-borne diseases in KBKdistricts of Odisha, India	2021-2022	175000/-
4	Institute of Eminence, University of Delhi	Climate Change or Climate Variability: Unriddling the Cause Behind the Submergence of Munroe Island in Kerala, India	2022-2023	3,00,000/-
5	Indian Council for Social Science Research (ICSSR)	Impact of Climate Change and Anthropogenic Activities on Spring Disappearance: A Geospatial Study on issues of water security in Himachal Pradesh, India	2022-2024	9,00,000/-
6	PMMMNMTT Scheme, Ministry of Education	"Impact Assessment of Climatic Variability on Tea Production in Darjeeling Region of West Bengalusing Artificial Intelligence and Machine Learning Techniques"	2023- 2024	10,05,000/-
7	Institute of Eminence, University of Delhi	Diyara Identification, Vulnerability Assessment, Climate Change Projections, and Climate Resilient Solutions for the Bihar Gangetic Region	2023- 2024	4,00,000/-
8	Institute of Eminence, University of Delhi	Climatic Variability and Vulnerability Assessment of Vector-Borne Diseases in North Eastern States of India	2024-2025	4,00,000/-
9	Institute of Eminence, University of Delhi	Assessing Urban and Shoreline Vulnerabilities in Kochi, Kerela in response to Climate change, and city level Mitigation and adaptation measures for a climate resilient city	2025-2026	4,00,000/-

Publication Profile

Research papers published in Refereed/Peer Reviewed Journals

1. **Sahu, N.**, Kesharwani, R., Das, P. et al. Spatiotemporal dynamics of rice cultivation in India. Trop Ecol (2025). https://doi.org/10.1007/s42965-025-00368-x **(IF:1.7, CS: 3.4, SCI/Scopus/WoS). Journal Rank: Q2** *(Ecology, Plant Science).* **(First & Corresponding author)**

2. **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). https://doi.org/10.1080/19475705.2024.2433115 **(IF:4.6, CS:8.0, SCI/Scopus/ WoS**). **Journal Rank: Q1** (*Earth and Planetary Sciences(*miscellaneous*)*), **Q1** (*Environmental Science(*miscellaneous)). **(First & Corresponding author)**

3. **Sahu, N.**, Nayan, R., Panda, A., Varun, A., Kesharwani, R., Das, P., Kumar, A., Mallick, S. K., Mishra, M. M., Saini, A., Aggarwal, S. P., & Nayak, S. (2025). Impact of Changes in Rainfall and Temperature on Production of Darjeeling Tea in India. Atmosphere, 16(1), 1. https://doi.org/10.3390/atmos16010001 **(IF:2.3, CS: 4.9, SCI/Scopus/WoS). Journal Rank: Q2** (Atmospheric Science, Environmental Science (miscellaneous)). **(First & Corresponding author)**

4. **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. https://doi.org/10.1007/s41324-024-00587-9 **(IF:2.0, CS: 9.9, Scopus/ WoS**). **Journal Rank: Q2** (*Computers in Earth Sciences*, *Geography, Planning and Development*), **Q3** (*Computer Science Applications*, **Q3** (*Artificial Intelligence)* **(First & Corresponding author)**

5. **Sahu, N**.; Saini, A.; Behera, S.; Sayama, T.; Nayak, S.; Sahu, L.; Duan, W.; Avtar, R.; Yamada, M.; Singh, R.B.; Takara, K. Impact of Indo-Pacific Climate Variability on Rice Productivity in Bihar, India. *Sustainability* **2020**, *12*, 7023 https://doi.org/10.3390/su12177023 **(IF:3.3, CS:7.7, SCI/Scopus/ WoS), Journal Rank: Q1**(*Geography, Planning and Development*), **Q2** (*Energy Engineering and Power Technology, Environmental Science, Management, Monitoring, Policy and Law, Renewable Energy, Sustainability and the Environment*). **(First & Corresponding author)**
6. **Sahu, N.**; Sayama, T.; Saini, A.; Panda, A.; Takara, K. Understanding the Hydropower and Potential Climate Change Impact on the Himalayan River Regimes—A Study of Local Perceptions and Responses from Himachal Pradesh, India. Water 2020, 12, 2739. https://doi.org/10.3390/w12102739 **(IF:3.0, CS:6.0, SCI/Scopus/WoS). Journal Rank: Q1***(Geography, Planning and Development),* Q2 *(Water Resources)*. **(First & Corresponding author)**

7. **Sahu N**, Das P, Saini A, Varun A, Mallick SK, Nayan R, Aggarwal SP, Pani B, Kesharwani R, Kumar A. Analysis of Tea Plantation Suitability Using Geostatistical and Machine Learning Techniques: A Case of Darjeeling Himalaya, India. Sustainability. 2023 Jun 26;15(13):10101. (**IF:3.3, CS:7.7, SCI/Scopus/ WoS), Journal Rank: Q1**(Geography, Planning and Development), **Q2** (Energy Engineering and Power Technology, Environmental Science, Management, Monitoring, Policy and Law, Renewable Energy, Sustainability and the Environment). https://doi.org/10.3390/su151310101**(First & Corresponding author)**

8. **Sahu, N.**, & Mishra, M. M. Assessing the vulnerability index of covid-19 pandemic in India. *GEOGRAPHY, ENVIRONMENT, SUSTAINABILITY* **2021**, *14*(4), 131–139. https://doi.org/10.24057/2071-9388-2021-059 (**IF:0.3, CS:1.9, Scopus**), **Journal Rank: Q3** (*Environmental science(miscellaneous), Geography, Planning and Development*). **(First & Corresponding author)**

9. **Sahu, N.**, & Mishra, M. M. Ramification of global and local climatic variability on resurgent cases of dengue in Delhi, India. *Disaster Advances* **2021**, *14*(7), 32–41. https://doi.org/10.25303/147da3221 (**Scopus**), **Journal Rank: Q4** (*Earth and Planetary Science (miscellaneous), Environmental Science (miscellaneous), Geography, Planning and Development, Safety,RiskReliability and Quality*). **(First & Corresponding author)**

10. **Sahu N**, Saini A, Behera SK, Sayama T, Sahu Limonlisa , Van- Thanh- Van Nguyen, Kaoru Takara (**2020**) Why Apple Orchards are shifting to the Higher Altitudes of the Himalayas? *PLoS ONE*, 15(7):e0235041, https://doi.org/10.1371/journal.pone.0235041 (**IF:1.3, C.S: 5.6 SCI/ Scopus**), **Journal Rank: Q1** *Multidisciplinary*. **(First & Corresponding author)**

11. **Sahu N,** Panda A, Nayak S, Saini A, Mishra M, Sayama T, Sahu Limonlisa, Duan W, Avtar R, Behera SK **(2020)** Impact of Indo-Pacific Climate Variability on High Streamflow Events in Mahanadi River Basin, India, *Water*, *12*(7), 1952; https://doi.org/10.3390/w12071952 **(IF:3.0, CS:6.0, SCI/Scopus/ WoS), Journal Rank: Q1** (*Geography, Planning and Development*), **Q2** (*Water Resources*). **(First & Corresponding author)**

12. **Sahu N**, Robertson A, Boer R, Behera S, DeWitt DG, Kaoru T, Kumar M, Singh RB: Probabilistic Seasonal Streamflow Forecasts of the **Citarum River, Indonesia**, Based on General Circulation Models, *Journal of Stochastic Environmental Research and Risk Assessment*, 2016, https://doi.org/10.1007/s00477-016-1297-4 (**IF:3.6, SCI/Scopus/WoS**), Rank 18/50 (Environmental Engineering), **Journal Rank: Q1** (*Environmental Science (miscellaneous), Safety, Risk, Reliability and Quality, Water Science and Technology*), **Q2 (***Environmental Chemistry, Environmental Engineering*). **(First & Corresponding author)**

13. **Sahu N**., Behera SK, Ratnam JV, Silva RV, Parhi P, Duan W, Takara K, Singh RB and Yamagata T: El Nino Modoki connection to extremely-low streamflow of the Paranaiba River in Brazil, ***Climate Dynamics,*** 2014: 42,1509-1516 https://doi.org/10.1007/s00382-013-2006-3 **(IF:3.7, SCI/ Scopus/WoS)**, Rank 2/105 (Atmospheric Science), **Journal Rank: Q1** *Atmospheric Science*. **(First & Corresponding author)**

14. **Sahu N**., Behera SK,Yamashiki Y,Takara K and Yamagata T: IOD and ENSO impacts on the extreme stream-flows of **Citarum river in Indonesia**, ***Climate Dynamics***, 2012, Volume 39, Issue 7-8, pp 1673-1680. https://doi.org/10.1007/s00382-011-1158-2 **(IF:3.7, SCI/ Scopus/WoS)**, **Journal Rank: Q1** *Atmospheric Science*. **Rank 2/105 (AtmosphericScience). (First & Corresponding author)**

15. **Sahu N**, Singh RB, Kumar P, Silva RV, Behera SK: La Niña Impacts on Austral Summer Extreme High-Streamflow Events of the Paranaíba River in Brazil, ***Advances in Meteorology,*** Vol. 2013, Article ID 461693, https://doi.org/10.1155/2013/461693, ISSN NO. 1687-9309. **(IF:2.1, CS:4.7, SCI/Scopus/WoS)**, **Journal Rank: Q2** (*Geophysics, Pollution),* **Q3** (*Atmospheric Science*). **(First & Corresponding author)**

16. **Sahu N**., Behera, S.K., Yamashiki, Y.,Takara, K. and Yamagata, T.,: Large Impacts of Indo-Pacific Climate Modes on the Extreme Streamflows of **Citarum River in Indonesia**, ***Journal of Global Environmental Engineering,***Vol.17, pp.1-8,2012. **(First & Corresponding author)**

17. Kumar, M., Dash, A., Majid, S. I., Tiwari, A., Bhadwal, S., & **Sahu, N.** (2025). Delineation of groundwater potential zones of India using GIS based Fuzzy-AHP techniques. ***Environmental and Sustainability Indicators***, 28. https://doi.org/10.1016/j.indic.2025.100932 **(IF:5.6, CS: 7.2, SCI/Scopus/WoS). Journal Rank: Q1** (Environmental Science (miscellaneous), Ecology, Evolution, Behaviour and Systematics, Agricultural and Biological Sciences (miscellaneous), Management, Monitoring, Policy and Law). **(Corresponding author)**
18. Nayak, S., & **Sahu, N.** (2025). Editorial for the Special Issue on Climate Change and Climate Variability, and Their Impact on Extreme Events (1st Edition). Atmosphere, 16(2), 182. https://doi.org/10.3390/atmos16020182 **(IF:2.3, CS: 4.9, SCI/Scopus/WoS). Journal Rank: Q2** (Atmospheric Science, Environmental Science (miscellaneous)). **(Corresponding author)**

19. 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. https://doi.org/10.1016/j.uclim.2024.102010 **(IF:6.9, CS:10.8, SCI/ Scopus/ WoS). Journal Rank: Q1** (Atmospheric Science), **Q1** (Environmental Science(miscellaneous), Geography, Planning and Development, Urban Studies). **(Corresponding author)**

20. Saini, A., **Sahu, N.**, & Nayak, S. (2023). Determination of Grid-Wise Monsoon Onset and Its Spatial Analysis for India (1901–2019). *Atmosphere*, *14*(9), 1424. https://doi.org/10.3390/atmos14091424 **(IF:2.3, CS: 4.9, SCI/Scopus/WoS). Journal Rank: Q2** (Atmospheric Science, Environmental Science (miscellaneous)). **(Corresponding author)**

21. Mishra MM, **Sahu N,** Pani B, Chakraborty A, Mallick G. Assessment of Human Health Vulnerability in Kalahandi-Balangir-Koraput Region of Odisha, India. Journal of Communicable Diseases. 2023 Jun 30;55(2):1-8. **(IF:1.54, Scopus)** https://doi.org/10.24321/0019.5138.202318 **(Corresponding author)**

22. Mishra MM, **Sahu N**, Mallick G, Pani B. Trend of malaria incidences and its association with rainfall in Kalahandi District of Odisha, India. *Indian Journal of Public Health.* 2023 Jan 1;67(1):166-9. **(IF:2.219, Scopus/ WoS), Journal Rank: Q3** (Medicine (miscellaneous)) https://doi.org/10.4103/ijph.ijph_916_22 **(Corresponding author)**

23. Saini A, **Sahu N**, Mishra SK, Jain S, Behera S, Dash SK. The Spatio-Temporal Onset Characteristics of Indian Summer Monsoon Rainfall and Their Relationship with Climate Indices. *Atmosphere*. 2022; 13(10):1581. https://doi.org/10.3390/atmos13101581 **(IF:2.3, CS: 4.9, SCI/ Scopus/ WoS). Journal Rank: Q2** (*Atmospheric Science, Environmental Science (miscellaneous)*). **(Corresponding author)**

24. Mishra MM, **Sahu N.** Climate and Disease vulnerability analysis in blocks of Kalahandi District of Odisha, India. Indian Journal of Public Health. **2022** Jan 1;66(1):20. https://doi.org/10.4103/ijph.ijph_1298_21 **(IF:2.219, Scopus/ WoS), Journal Rank: Q3** (*Medicine (miscellaneous*)) **(Corresponding author)**

25. Mishra M.M, **Sahu N,** Mallick G, Pani B. Knowledge, Perception, and Behaviour Concerning Impact of Climate Variability on Health: A Cross-Sectional Study in the Tribal-dominated Kalahandi District, India. Journal of Communicable Diseases. 2022 June;54(2):39-48. https://doi.org/10.24321/0019.5138.202269 **(IF:1.54, Scopus) (Corresponding author)**

26. Saini, A., **Sahu, N.**, Duan, W., Kumar, M., Avtar, R., Mishra, M., Kumar, P., Pandey, R., & Behera, S. Unraveling intricacies of monsoon attributes in homogenous monsoon regions of India. *Frontiers in Earth Science* **2022**, *10*. https://doi.org/10.3389/feart.2022.794634 **(IF:2.0 CS:4.3, SCI/ Scopus/ WoS), Journal Rank: Q1 (***Multidisciplinary).* **(Corresponding author)**

27. Saini, A., **Sahu, N**. Decoding trend of Indian summer monsoon rainfall using multimethod approach. *Stoch Environ Res Risk Assess* **2021**. https://doi.org/10.1007/s00477-021-02030-z **(IF:3.6, SCI/ Scopus/WoS). Journal Rank: Q1** *(Environmental Science (miscellaneous), Safety, Risk, Reliability and Quality, Water Science and Technology*), **Q2 (***Environmental Chemistry, Environmental Engineering*). **(Corresponding author)**

28. Mishra MM, **Sahu N**, Pandey BW, Singh RB. Assessing Human Health Vulnerabilities inthe Blocks of Kalahandi district of Odisha, India. *Disaster Advances* **2021**, 14(4).32-40. **(Scopus), Journal Rank: Q4** (*Earth and Planetary Science (miscellaneous), Environmental Science (miscellaneous), Geography, Planning and Development, Safety,RiskReliability and Quality*). **(Corresponding author)**

29. Mishra MM, **Sahu N.** Assessing Waterborne Disease Vulnerabilities in the Blocks of Kalahandi District of Odisha, India. Indian Journal of Community Medicine. 2022 Apr 1;47(2):229. **(Scopus/ WoS)**, https://doi.org/10.4103/ijcm.ijcm_607_21 **Journal Rank: Q3** (*Public Health, Environmental and Occupational Health*) **(Corresponding author)**

30. Mishra, M. M., & **Sahu, N**. Spatiotemporal distribution and trend analysis of Waterborne Diseases in Kalahandi District of Odisha, India. *Journal of Communicable Diseases* **2021**, *53*(04), 23–28. https://doi.org/10.24321/0019.5138.202170 **(Scopus)**, **Journal Rank: Q4** (*Infectious Diseases*). **(Corresponding author)**

31. Panda A and **Sahu N (2019)** Trend analysis of seasonal rainfall and temperature pattern in Kalahandi, Bolangir and Koraput districts of Odisha, India, *Atmospheric Science Letters*, https://doi.org/10.1002/asl.932 **(IF: 2.2, CS: 3.9, SCI/ Scopus)**, **Journal Rank: Q2 (***AtmosphericScience).* **(Corresponding author)**

32. Panda A, **Sahu** Saini, A.; **Sahu, N**.; Kumar, P.; Nayak, S.; Duan, W.; Avtar, R.; Behera, S. Advanced Rainfall Trend Analysis of 117 Years over West Coast Plain and Hill Agro-Climatic Region of India. *Atmosphere* **2020**, *11*, 1225. https://doi.org/10.3390/atmos11111225 **(IF:2.3, CS: 4.9, SCI/ Scopus/ WoS)**, **Journal Rank: Q2** (*Atmospheric Science, Environmental Science (miscellaneous)*). **(Corresponding author)**

33. N, Behera SK, Sayama T, Sahu Limonlisa , Avtar Ram, R.B. Singh and Masafumi Yamada **(2019)** Impact of Climate Variability on Crop yield in Kalahandi, Bolangir and Koraput Districts of Odisha, India, *Climate*, 7(11), 126; https://doi.org/10.3390/cli7110126 **(IF: 3.2, CS:4.9, Scopus/WoS)**, **Journal Rank: Q3 (***Atmospheric Science*) **(Corresponding author)**

34. Pandit P, Saini A, **Sahu N**, Mehra R. Geochemical evaluation and environmental risk assessment of heavy metals: A case study from Ireland using Tellus stream sediment data (2011–2017). Groundwater for Sustainable Development. 2023 Jun 22:100974. **(IF:5.6, CS:9.5, Scopus/ WoS), Journal Rank: Q1**(Geography, Planning and Development), **Q1** (Environmental Chemistry), **Q1** (Environmental Engineering, Water Science and Technology) https://doi.org/10.1016/j.gsd.2023.100974

35. Meena, R. K., Bhandari, M. S., Thakur, P. K., Negi, N., Pandey, S., Kant, R., Sharma, R., **Sahu, N.,** & Avtar, R. (2024). MaxEnt-Based Potential Distribution Mapping and Range Shift under Future Climatic Scenarios for an Alpine Bamboo *Thamnocalamus spathiflorus* in Northwestern Himalayas. *Land*, *13*(7), 931. https://doi.org/10.3390/land13070931 https://doi.org/1.3390/land110081274 **(IF:3.2, CS: 5.9, Scopus/WoS)**, **Journal Rank: Q2** (*Ecology, Nature and Landscape Conservation*), **Q3** (*Global and Planetary Change*)

36. 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. https://doi.org/10.1007/s10668 024-05928-0 (**IF:4.2, CS: 4.4, SCI/ Scopus/ WoS**). Journal Rank: **Q1** (Geography, Planning & Development).

37. Majid, S. I., Kumar, M., **Sahu, N.**, Kumar, P., & Tripathi, D. K. (2024). Application of ensemble fuzzy weights of evidence-support vector machine (Fuzzy WofE-SVM) for urban flood modeling and coupled risk (CR) index for ward prioritization in NCT Delhi, India. *Environment, Development and Sustainability*, 1-39.https://doi.org/10.1007/s10668-024-04926-6 (**IF:4.2, CS: 4.4, SCI/ Scopus/ WoS**.) **Journal Rank: Q1**(*Geography, Planning and Development*), **Q2** (*Management, Monitoring, Policy and Law*, *Economics and Econometrics)*

38. Kumar, R., Kumar, M., Tiwari, A., Majid, S. I., Bhadwal, S., **Sahu, N.,** & Avtar, R. (2023). Assessment and Mapping of Riverine Flood Susceptibility (RFS) in India through Coupled Multicriteria Decision Making Models and Geospatial Techniques. *Water (Switzerland)*, *15*(22). https://doi.org/10.3390/w15223918 (**IF:3.0, CS:6.0, SCI/ Scopus/ WoS**). **Journal Rank: Q1** (*Geography, Planning and Development*), **Q2** (*Water Resources*).

39. Pragya, Kumar, M., Tiwari, A., Majid, S. I., Bhadwal, S., **Sahu, N**., … Avtar, R. (2023). Integrated Spatial Analysis of Forest Fire Susceptibility in the Indian Western Himalayas (IWH) Using Remote Sensing and GIS-Based Fuzzy AHP Approach. *Remote Sensing*, *15*(19). https://doi.org/10.3390/rs15194701 (**IF:4.1, CS: 8.6, SCI/ Scopus/ WoS**). **Journal Rank: Q1** (*Geosciences, Multidisciplinary*, *General Earth and Planetary Sciences*)

40. Mishra H, Pandey BW, Mukwada G, De Los Rios P, Nigam N, **Sahu N**. Trapped within nature: climatic variability and its impact on traditional livelihood of Gaddi transhumanceof Indian Himalayas. Local Environment. 2023 Jan 10:1-7. https://doi.org/10.1080/13549839.2022.2162025 (**IF:2.8, CS:5.2, Scopus/ WoS**), **Journal Rank: Q1 (***Geography, Planning and Development*); **Q1 (***Management, Monitoring, Policy and Law)*

41. Avtar R, Rinamalo AV, Umarhadi DA, Gupta A, Khedher KM, Yunus AP, Singh BP, Kumar P, **Sahu N**, Sakti AD. Land Use Change and Prediction for Valuating Carbon Sequestration in Viti Levu Island, Fiji. Land. 2022 Aug 8;11(8):1274. https://doi.org/1.3390/land110081274 (**IF:3.2, CS: 5.9, Scopus/WoS**), **Journal Rank: Q2** (*Ecology, Nature and Landscape Conservation*), **Q3** (*Global and Planetary Change*)

42. Sinha KK, Gupta MK, Banerjee MK, Meraj G, Singh SK, Kanga S, Farooq M, Kumar P, **Sahu N.** Neural Network-Based Modeling of Water Quality in Jodhpur, India. Hydrology. **2022** May;9(5):92. https://doi.org/10.3390/hydrology9050092 **(IF: 3.2, CS: 5.9 Scopus/WoS**), **Journal Rank: Q2** (*Earth-Surface Processes, Oceanography, Waste Management and Management and Disposal, Water Science and Techonology*).

43. Debnath J, Meraj G, Das Pan N, Chand K, Debbarma S, Sahariah D, Gualtieri C, Kanga S, Singh SK, Farooq M, **Sahu N.** Integrated remote sensing and field-based approach to assess the temporal evolution and future projection of meanders: A case study on River Manu in North-Eastern India. PloS one. 2022 Jul 20;17(7):e0271190. https://doi.org/10.1371/journal.pone.0271190 **(IF:1.3 ; SCI/ Scopus**), **Journal Rank: Q1 (***Multidisciplinary*)

44. Fayaz M, Meraj G, Khader SA, Farooq M, Kanga S, Singh SK, Kumar P, **Sahu N.** Management of Landslides in a Rural–Urban Transition Zone Using Machine Learning Algorithms—A Case Study of a National Highway (NH-44), India, in the Rugged Himalayan Terrains. Land. **2022** Jun;11(6):884. https://doi.org/10.3390/land11060884 **(IF:3.2, CS: 5.9, Scopus/WoS**), **Journal Rank: Q2** (*Ecology, Nature and Landscape Conservation*), **Q3** (*Global and Planetary Change*)

45. Tyagi N, Jayal T, Singh M, Mandwal V, Saini A, **Sahu N,** Nayak S. Evaluation of Observed and Future Climate Change Projection for Uttarakhand, India, Using CORDEX- SA. Atmosphere. **2022** Jun;13(6):947. https://doi.org/10.3390/atmos13060947 **(IF:2.3, CS: 4.9, SCI/ Scopus/ WoS**), **Journal Rank: Q2** (*Atmospheric Science, Environmental Science (miscellaneous*)).

46. Meraj G, Kanga S, Ambadkar A, Kumar P, Singh SK, Farooq M, Johnson BA, Rai A, **Sahu N.** Assessing the Yield of Wheat Using Satellite Remote Sensing-Based Machine Learning Algorithms and Simulation Modeling. Remote Sensing. **2022** Jan;14(13):3005. https://doi.org/10.3390/rs14133005 **(IF:4.1, CS: 8.6, SCI/ Scopus/ WoS**). **Journal Rank: Q1** (*Geosciences, Multidisciplinary*), **Q1** (*General Earth and Planetary Sciences*)

47. Duan W, Zou S, Christidis N, Schaller N, Chen Y, **Sahu N,** Li Z, Fang G, Zhou B. Changesin temporal inequality of precipitation extremes over China due to anthropogenic forcings.npj Climate and Atmospheric Science. **2022** Apr 19;5(1):1-3. https://doi.org/10.1038/s41612-022-00255-5 **(IF: 8.4, SCI/ Scopus/ WoS**), **Journal Rank: Q1** (*Atmospheric Science, Environmental Chemistry, Global and Planetary Change.*)

48. Pandit P, Saini A, Chidhambaram S, Kumar V, Panda B, Ramanathan AL, **Sahu N,** Singh AK, Mehra R. Tracing geochemical sources and health risk assessment of uranium in groundwater of arid zone of India. Scientific Reports. **2022** Jun 1;12(1):1-2. https://doi.org/10.1038/s41598-022-05770-2 **(IF:3.9, CS: 6.9, SCI/ Scopus/WoS**), **Journal Rank: Q1** (*Multidisciplinary*)

49. Rather MA, Meraj G, Farooq M, Shiekh BA, Kumar P, Kanga S, Singh SK, **Sahu N**, Tiwari SP. Identifying the Potential Dam Sites to Avert the Risk of Catastrophic Floods in the Jhelum Basin, Kashmir, NW Himalaya, India. Remote Sensing. **2022** Mar 22;14(7):1538. https://doi.org/10.3390/rs14071538 **(IF:4.1, CS: 8.6, SCI/ Scopus/WoS**), **Journal Rank: Q1** (*Geosciences, Multidisciplinary*), **Q1** (*General Earth and Planetary Sciences*)

50. Bera, A., Meraj, G., Kanga, S., Farooq, M., Singh, S. K., **Sahu, N.**, & Kumar, P.Vulnerability and risk assessment to climate change in Sagar Island, India. *Water* **2022**, *14*(5), 823. https://doi.org/10.3390/w14050823 **(IF:3.0, CS:6.0, SCI/ Scopus/ WoS**). **Journal Rank: Q1** (*Geography, Planning and Development*), **Q2** (*Water Resources*).

51. Kumar, R., Nath, A. J., Nath, A., **Sahu, N.**, & Pandey, R. Landsat-based multi-decadal spatio-temporal assessment of the vegetation greening and browning trend in the eastern Indian Himalayan region. *Remote Sensing Applications: Society and Environment* **2022**, *25*, 100695. https://doi.org/10.1016/j.rsase.2022.100695 **(IF:4.5, CS:7.9, Scopus/ WoS**), **Journal Rank: Q1 (***Geography, Planning and Development*), **Q2** (*Computers in Earth Sciences*).

52. Mishra, M., Kar, D., Debnath, M., **Sahu, N**., & Goswami, S. Rapid eco-physical impact assessment of tropical cyclones using geospatial technology: a case from severe cyclonic storms Amphan. *Natural Hazards* **2021**, 1-15. https://doi.org/10.1007/s11069-021-05008-w **(IF:3.7, CS:4.9, SCI/ Scopus/ WoS**), **Journal Rank: Q1** (*Earth and Planetary Science (miscellaneous*), **Q2** (*Atmospheric Science, Water Science, Water Science and Technology*).

53. Huang, W., Duan, W., Nover, D., **Sahu, N**., & Chen, Y. An integrated assessment of surface water dynamics in the Irtysh River Basin during 1990–2019 and exploratory factoranalyses. *Journal of Hydrology* **2021**, *593*, 125905 https://doi.org/10.1016/j.jhydrol.2020.125905 **(IF:6.9, CS:11.1, SCI/ Scopus/ WoS**), **Journal Rank: Q1** (Water Science and Technology).

54. Nath, A. J., Kumar, R., Devi, N. B., Rocky, P., Giri, K., Sahoo, U. K.,.....& Pandey, R. Agroforestry land suitability analysis in the Eastern Indian Himalayan region. *Environmental Challenges* **2021**, *4*, 100199. https://doi.org/10.1016/j.envc.2021.100199 **(CS: 11.7, Scopus), Journal Rank: Q4** (*Ecology, Geography, Planning and Development*

55. Masroor, M., Avtar, R., Sajjad, H., Choudhari, P., Kulimushi, L. C., Khedher, K. M., Komolafe, A. A., Yunus, A. P., & **Sahu, N**. Assessing the influence of land use/land cover alteration on climate variability: An analysis in the Aurangabad district of Maharashtra State, India. *Sustainability* **2022**, *14*(2), 642. https://doi.org/10.3390/su14020642 **(IF:3.3, CS:7.7, SCI/ Scopus/ WoS), Journal Rank: Q1**(*Geography, Planning and Development*), **Q2** (*Energy Engineering and Power Technology, Environmental Science, Management, Monitoring, Policy and Law, Renewable Energy, Sustainability and the Environment*).

56. Nayak, S., Maity, S., **Sahu, N.**, Saini, A., Singh, K. S., Nayak, H. P., & Dutta, S. Application of "observation minus reanalysis" method towards LULC change impact overSouthern India. *ISPRS International Journal of Geo-Information* **2022**, *11*(2), 94. https://doi.org/10.3390/ijgi11020094 **(IF:2.8, CS:7.2, SCI/ Scopus/WoS**), **Journal Rank: Q1** (*Earth and Planetary Sciences (miscellaneous) Geography, Planning andDevelopment*), **Q2** (*Computers in Earth Sciences*).

57. Shyam, M., Meraj, G., Kanga, S., Sudhanshu, Farooq, M., Singh, S. K., **Sahu, N.**, & Kumar, P. Assessing the groundwater reserves of the Udaipur district, Aravalli Range, India, using geospatial techniques. *Water* **2022**, *14*(4), 648. https://doi.org/10.3390/w14040648 **(IF:3, CS:6, SCI/ Scopus/ WoS**), **Journal Rank: Q1** (*Geography, Planning and Development*), **Q2** (*Water Resources*).

58. Avtar, R., Kouser, A., Kumar, A., Singh, D., Misra, P., Gupta, A., Yunus, A. P., Kumar, P., Johnson, B. A., Dasgupta, R., **Sahu, N.,** & Besse Rimba, A. (2021). Remote Sensing for International Peace and Security: Its Role and Implications. *Remote Sensing*, *13*(3), 439. https://doi.org/10.3390/rs13030439 **(IF:4.1, SC:8.6, SCI/ Scopus/ WoS**), **Journal Rank: Q1 (***Earth and Planetary Sciences (miscellaneous)*

59. Chand, K., Kuniyal, J. C., Kanga, S., Guleria, R. P., Meraj, G., Kumar, P., Farooq, M., Singh, S. K., Nathawat, M. S., **Sahu, N.**, & Kumar, R. Aerosol characteristics and their impact on the Himalayan Energy Budget. *Sustainability* **2021**, *14*(1), 179. https://doi.org/10.3390/su14010179 **(IF:3.3, CS:7.7, SCI/ Scopus/ WoS), Journal Rank: Q1**(*Geography, Planning and Development*), **Q2** (*Energy Engineering and Power Technology, Environmental Science, Management, Monitoring, Policy and Law,Renewable Energy, Sustainability and the Environment*)

60. Hu, Y., Duan, W., Chen, Y., Zou, S., Kayumba, P. M., & **Sahu, N**. An integrated assessment of runoff dynamics in the Amu Darya River Basin: Confronting climate changeand multiple human activities, 1960–2017. *Journal of Hydrology* **2021**, *603*, 126905. https://doi.org/10.1016/j.jhydrol.2021.126905 **(IF:6.9, CS:11.1, SCI/ Scopus/ WoS**). **Journal Rank: Q1** (*Water Science and Technology*).

61. Singh, S., Singh, H., Sharma, V., Shrivastava, V., Kumar, P., Kanga, S., **Sahu, N.**, Meraj,G., Farooq, M., & Singh, S. K. Impact of forest fires on air quality in Wolgan Valley, NewSouth Wales, Australia—a mapping and monitoring study using Google Earth engine. *Forests* **2021**, *13*(1), 4. https://doi.org/10.3390/f13010004**(IF:2.5, CS:4.6, SCI/ Scopus/ WoS**), **Journal Rank: Q1** *(Forestry*).

62. Kumar, P.; Dasgupta, R.; Dhyani, S.; Kadaverugu, R.; Johnson, B.A.; Hashimoto, S.; **Sahu, N**.; Avtar, R.; Saito, O.; Chakraborty, S.; Mishra, B.K. Scenario-Based HydrologicalModeling for Designing Climate-Resilient Coastal Water Resource ManagementMeasures: Lessons from Brahmani River, Odisha, Eastern India. *Sustainability* **2021**, *13*, 6339. https://doi.org/10.3390/su13116339 **(IF:3.3, CS:7.7, SCI/Scopus/ WoS)**, **Journal Rank: Q1**(*Geography, Planning and Development*), **Q2** (*Energy Engineering and Power Technology, Environmental Science, Management, Monitoring, Policy and Law,Renewable Energy, Sustainability and the Environment*).

63. Vladimirov, L.N.; Machakhtyrov, G.N.; Machakhtyrova, V.A.; Louw, A.S.; **Sahu, N**.; Yunus, A.P.; Avtar, R. Quantifying the Northward Spread of Ticks (Ixodida) as Climate Warms in Northern Russia. *Atmosphere* **2021**, *12*, 233. https://doi.org/10.3390/atmos12020233 **(IF:2.3, CS:4.9, SCI/ Scopus/WoS)**, **Journal Rank: Q2** (*Atmospheric Science, Environmental Science (miscellaneous*)).

64. Kanga, S., Meraj, G., Johnson, B. A., Singh, S. K., PV, M. N., Farooq, M., Kumar, P., Marazi, A., & Sahu, N. (2022). Understanding the Linkage between Urban Growth and Land Surface Temperature—A Case Study of Bangalore City, India. Remote Sensing, 14(17), 4241. https://doi.org/10.3390/rs14174241 **(IF:4.1, SC:8.6, SCI/ Scopus/ WoS)**, **Journal Rank: Q1 (***Earth and Planetary Sciences (miscellaneous)*

65. Molekoa, M.D.; Avtar, R.; Kumar, P.; Thu Minh, H.V.; Dasgupta, R.; Johnson, B.A.; **Sahu, N**.; Verma, R.L.; Yunus, A.P. Spatio-Temporal Analysis of Surface Water Quality in Mokopane Area, Limpopo, South Africa. *Water* **2021**, *13*, 220. https://doi.org/10.3390/w13020220 **(IF:3.0, CS:6.0, SCI/Scopus/ WoS)**, **Journal Rank: Q1**(*Geography, Planning and Development*), **Q2** (*Water Resources*).

66. Avtar, R.; Kumar, P.; Supe, H.; Jie, D.; Sahu, N.; Mishra, B.K.; Yunus, A.P. Did the COVID-19 Lockdown-Induced Hydrological Residence Time Intensify the Primary Productivity in Lakes? Observational Results Based on Satellite Remote Sensing. *Water* 2020**, *12*, 2573.** https://www.mdpi.com/2073-4441/12/9/2573 **(IF:3.0, CS:6.0, SCI/ Scopus/ WoS), Journal Rank: Q1** (*Geography, Planning and Development*), **Q2**(*Water Resources*).

67. Meraj, G., Kanga, S., Ambadkar, A., Kumar, P., Singh, S. K., Farooq, M., Johnson, B. A., Rai, A., & Sahu, N. (2022). Assessing the Yield of Wheat Using Satellite Remote Sensing-Based Machine Learning Algorithms and Simulation Modeling. Remote Sensing, 14(13), 3005. https://doi.org/10.3390/rs14133005 **(IF:4.1, CS:8.6, SCI/ Scopus/WoS)**, **Journal Rank: Q1** *Earth and Planetary Sciences (miscellaneous).*

68. Rahman, M. M., Avtar, R., Yunus, A. P., Dou, J., Misra, P., Takeuchi, W., **Sahu, N.,** Kumar, P., Johnson, B. A., Dasgupta, R., Kharrazi, A., Chakraborty, S., & Agustiono Kurniawan, T. (2020). Monitoring Effect of Spatial Growth on Land Surface Temperature in Dhaka. *Remote Sensing,* 12(7), 1191. https://doi.org/10.3390/rs12071191 **(IF:4.1, CS: 8.6, SCI/ Scopus/ WoS). Journal Rank: Q1** (Geosciences, Multidisciplinary, General Earth and Planetary Sciences)

69. Avtar R , **Sahu N** , Aggarwal A.K., Chakraborty S., Kharrazi A., Yunus A.P., Dou J and Kurniawan T.A. (**2019**) Exploring Renewable Energy Resources Using Remote Sensing and GIS—A Review, *Resources*, *8*(3), 149; https://doi.org/10.3390/resources8030149 **(IF :3.2, CS: 7.2**, **Scopus/WoS**), **Journal Rank: Q2** (*Management, Monitoring, Policy and Law, Nature and Landscape Conservation*)

70. Kumar M, Singh RB, Pravesh R, Kumar P, Tripathi DK, **Sahu N** (2018) Urban Growth Dynamics and Modeling using Remote Sensing Data and Multivariate Statistical Techniques, ***Current Science***, Vol. 114, Issue:10 2018. https://www.jstor.org/stable/26495646 (**IF:1.0, SCI/ Scopus**), **Journal Rank: Q2** (*Multidisciplinary*)

71. Duan W, He B, **Sahu N**, Luo P, Nover D, Hu M, Takara K. Spatiotemporal variability of Hokkaido's seasonal precipitation in recent decades and connection to water vapour flux. International Journal of Climatology. 2017 Jul;37(9):3660-73. https://doi.org/10.1002/joc.4946, **(IF:2.8, CS:8.2, SCI/ Scopus**), 31/94 *(Meteorology & Atmospheric Sciences*), **Journal Rank: Q1** *Atmospheric Science*.

72. Duan W.,Takara K., Yamashiki Y., Bin H., Pingping L., Daniel N., **Sahu N**.: Spatiotemporal evaluation of water quality incidents in Japan between 1996 and 2007, *Chemosphere* 93(6):946-953, 2013, https://doi.org/10.1016/j.chemosphere.2013.05.060 (**CS:18.1, Scopus/WoS), Journal Rank: Q1** (*Chemistry (miscellaneous), Environmental Chemistary, Environmental Engineering, Health, Toxicology and Mutagenesis, Medicine (miscellaneous), Pollution, Public Health, Environment and Occupational Health*)

73. Bhadwal, S., Kumar, M., & **Sahu, N**. (in press). Role of urban green space in regulating land surface temperature in NCT Delhi using explainable artificial intelligence. *Urban Climate*. **(IF: 6.9, CS: 10.8, SCI/Scopus/WoS). Journal Rank: Q1** (Atmospheric Science), Q1 (Environmental Science (miscellaneous), Geography, Planning and Development, Urban Studies).

Other Peer-Reviewed Publications/Conference Proceedings/Book Chapters

74. 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 Urban Sustainability (Vol. Part F3945, pp. 107–130). Springer. https://doi.org/10.1007/978-981-97-9658-8_6

75. Kumar, R., **Sahu, N**., Mishra, M.M. (2022). Geospatial Analysis of Kosi River Course from 1998 to 2018. In: Kumar, P., Nigam, G.K., Sinha, M.K., Singh, A. (eds) Water Resources Management and Sustainability. Advances in Geographical and Environmental Sciences. Springer, Singapore. https://doi.org/10.1007/978-981-16-6573-8_20

76. **Sahu N**, Mishra MM. (2021) Association and Effects of ISMR and El Niño Southern Oscillation on Dengue Outbreaks in India. In: Mishra R.K., Singh R.B., Dubey A. (eds) Sustainable Climate Action and Water Management. Advances in Geographical and Environmental Sciences. Springer, Singapore. https://doi.org/10.1007/978-981-15-8237- 0_13

77. Saini, A., & **Sahu, N.** (2020). Shifting of Monsoon Onset and Understanding Its Expected Impact on Environment in India. The Indian Geographical Journal, 95(2), 292–302.

78. Panda A and **Sahu N** (2019) Water quality assessment:A comparative analysis between Han and Mahanadi river basin, Sushila Nasimham and Kim Do-young (Eds) Strengthening special strategic partnership India & South Korea, Manak Publication,New Delhi,PP:81-110, ISBN 9788194303503.

79. Panda, A., & **Sahu, N.** (2018). Understanding the relation between seasonal climatic parameters and cropping pattern in Bolangir district of Odisha, 16(2), 13–23.

80. Saini, A., and **Sahu, N.** (2018). Climate Variability, Land-Use and Land-Cover Change (LULC) in Temperate River Basin: A Case form Han River Basin, South Korea. In Act East: Transitions in India's Engagement with South Korea (1st ed., pp. 84-95). New Delhi, Delhi: Manak Publications Pvt.

81. Saini, A., and **Sahu, N**. (2017). Urbanization Induced Air Pollution and its Impact: Cases of Delhi and Seoul. In *Forging a Multidimentional Partnership in the 21st Century, Ed* Sushila Narsimham and Kim Do Young (pp. 123-143). New Delhi: Manak Publication Pvt.,ISBN: 9789378314438.

82. Gupta, L. N., Avtar, R., Kumar, P., Gupta, G. S., Verma, R. L., **Sahu, N**., … Singh, S. K. (2014). A Multivariate Approach for Water Quality Assessment of River Mandakini in Chitrakoot, India. Journal of Water Resource and Hydraulic Engineering, 3(1), 22–29.

83. Kumar A, **Sahu N,**Batar A (2014) Environmental Implications of Brass Industry in Moradabad City,Uttar Pradesh, Edited by Dr Subash Anand Progress in Environmental Management:Indian Experiences, Research India Publication, New Delhi, Chapter 8, pp.121-138.

84. Avtar, R., Kumar, P., Singh, C.K., **Sahu, N.** et al. Hydrogeochemical Assessment of Groundwater Quality of Bundelkhand, India Using Statistical Approach. Water Qual Expo Health 5, 105–115 (2013). https://doi.org/10.1007/s12403-013-0094-2

85. Singh, R.B. and Sahu Netrananda (2008) Climate Change, Flooding and Biodiversity in the Sundarban Region, West BengalEtd Singh R.B. et al., Proceedings of International Conference on Land Use Change, Biodiversity and Climate Change, organized by Nesamony Memorial Christian College, Kanyakumari, Tamil Nadu on 6-7th, October, 2008), Vol. 1, ISBN 13:978-81-908283-1-4 2008.

Invited Lecture delivered/Paper presented						
Sl. No.	**Title of the Invited Lecture delivered/ Paper presented**	**Details of Conference / Seminar/ FDP/ Organizing Institution**	**Category/ Type of Event**	**Date of Presentation (yyyy-mm-dd)**	**Duration (in mins.)**	**Invited Talk/Paper Presented**
1	Environmental studies and disaster management	**Ranchi University**	National	2021-11-25	120	Resource Person
2	Higher Study and Scope of Research for Geographers in Foreign Countries	**Central Universityof Tamil Nadu**	National	2021-07-03	90	Invited Lecture
3	Understanding Climate Change	**JMI University**, Delhi	National	2017-02-21	120	Resource Person
4	Understanding disasters and best practices preparedness mechanism	**Utkal University**	State University	2021-12-14	60	Invited Lecture
5	Higher study and scope of Geographers in foreign countries	**Central Universityof Tamil Nadu**	State University	2021-07-03	90	Invited Lecture
6	Impact of climate variability on agriculture in India	Young Sustainable Symposium, **Hokkaido University**, Japan	International (Abroad)	2020-02-03	20	Paper Presentationin Seminar
7	Impact of climate changein Himachal Himalayas	AOGS Singapore2019	International (Abroad)	2019-07-29	20	Paper Presentationin Seminar
8	Descriptive statistics and Measures of Association and correlation	Kalindi College, University of Delhi	National	2017-11-13	60	Invited Lecture
9	Climatic action with technology transfer and green finance for climate action	Climate Change Conclave: 21- 22 April 2018, University of Delhi	National	2018-04-22	30	Paper Presentationin Seminar

10	How ecologically sensitive is our ecological zone	Climate Change Conclave: 21-22 April 2018, University of Delhi	National	2018-04-22	30	Paper Presentation in Seminar
11	Climatic variability and its impact on the agricultural Production	Climate Change Conclave: 21- 22 April 2018	National	2018-04-21	30	Paper Presentation in Seminar
12	Quantitative techniques in Social Science Research	Department of Geography, University of Delhi	National	2014-12-26	60	Invited Lecture
13	Impact of ENSO Modokiin Paranaiba Catchment, Brazil	Japan Geoscience Union Meeting 2011	International (Abroad)	2011-05-27	30	Paper Presentation in Seminar
14	Climate change and adaptability: A case study fromNako village ofthe Hangrang valley of Himachal Himalayas	Bilateral Seminal between India and Japan,14th January 2016	International (Abroad)	2016-01-14	30	Paper Presentation in Seminar
15	Disaster Reductions and environmental concerns in Delhi	65th GCOE-ARS Seminar	International (Abroad)	2016-01-15	60	Invited Lecture
16	Land use, bio-diversity and climate change	**Nesanmony Memorial Christian College**, 6-7 October 2008	International (within country)	2008-10-07	30	Paper Presentation in Seminar
17	Socio-economic and political adhrences to the POSCO project	RASK, **JNU**, 18-19 April, 2016	International (within country)	2016-04-19	30	Paper Presentation in Seminar
18	Sustainable tourism in Ajodhya: A case study of Ram Janam bhoomi complex	NAGI, Departmentof Geography, **University of Jammu**	National	2015-12-02	30	Paper Presentation in Seminar

19	Application of qualitative Techniques in Social Science Research, and Data Types and Sampling Methods	ICSSR Research Methodology Course, **HBN University**	National	2015-02-14	120	Invited Lecture
20	Impact of climate change on the phenology of temperate wet and dry region: A case of Himachal Himalaya	International Conference, **Kalindi college**, 1-2 Feb. 2017	International (within country)	2017-02-02	30	Paper Presentation in Seminar
21	Environmental ethics, resources depletion, and sustainable development	**Kalindi College**, University of Delhi	National	2016-02-26	30	Paper Presentation in Seminar
22	Suspended particulate matter " A comparative study of Delhi and Seoul"	Researchers' Association for the Study of Korea, on 13-14, October., **JMI**, 2017.	International (within country)	2017-10-14	30	Paper Presented
23	Delivered Lectures on the topic Research Methodology Course for Ph.D. students in Social Science	**HBN Garhwal University**	National	2015-02-14	240	Resource Person
24	Probabilistic seasonal streamflow Forecasts of the Citarum river, Indonesia, Based on GCM data	**9th IGU (International Geographical Union)**	International (within country)	2016-03-18	30	Paper Presented
25	Presented paper on Environmental Clearance for POSCO:	International Conference, organized by **JNU** and Researchers' Association for the	International (within country)	2014-03-21	30	Paper Presentation in Seminar

	Reasons for almost one decade of delay	Study of Korea, on 21-22, March. 2014.				
26	Invited speaker as a resource person Refresher Course in Environmental Studies & Disaster Management	Refresher Course in **Central University of Jharkhand,** Environmental Studies & Disaster Management on 17.11.2021 to 30.11.2021	National	25.11.2021	90	Resource Person
27	Invited speaker as a resource person Refresher Course, Topic: "Climate variability and hydrometeorol ogical disasters"	Refresher Course in UGC- Human Resource Development Centre, **Jamia Millia Islamia,** New Delhi, on 22.7.2022 to 4.8.2022	National	26.7.2022	90	Resource Person
28	Invited speaker as a resource person, Theme: "Circular Economy & Green Infrastructure for Sustainable City"	Topic: "Environmental impact assessment for sustainable cities" **University Sains Malaysis,** Penang, Malaysia, dated on 24.02.2022	International	24.02.2022	90	Resource Person
29	Invited speaker as a resource person, on a training course: "Solid Waste Management for the Clean Environment, Sustainable Development and Governance & Water Environmental Sustainability."	Topic: "Are we becoming greedy-role of awareness of citizens in EIA" **Pokhara University**, Dhugepatan, Pokhara-30, Nepal. Dated on 10.09.2022	International	10.09.2022	90	Resource Person
30	Invited speaker as a resource person, Theme: "Advanced	Topic: 'Indo-Pacific Climate Variability and	National	13.08.2022	90	Resource Person

	Geospatial Technologies for Disaster Risk Reduction (DRR)."	Hydrometeorologicalal Disasters'. Suresh Gyan Vihar University, Jaipur (Rajasthan), India. Dated on 13.08.2022				
31	Convenor	Geographical Dimensions of Sustainability and Recovery: Social, Cultural, and Environmental Dimensions. Dated on 3-4 Oct, 2023, University of Delhi	International Conference (within country)	3-4 Oct, 2023	30	Convenor
32	Climate Change and Himalayan Dilemma	Centre for Himalayan Studies-International Collaboration Seminar: Himalayan Geosystem: Societyand Sustainability. University of Delhi, Dated on 24 May,2024	International Seminar (within country)	24 May, 2024	30	Invited Speake r
33	Co-organizer	Climate Change Conclave- Inception, Implementation and Impacts (C3I3) at IIT Delhi, Dated on: 27-28 May, 2024	Climate Change Conclave	27-28 May, 2024	30	Co-organize r
34	Chair	Technical Session Titled - "Data Challenges, Recent Scientific Advancements in Disaster Studies and Response, Recovery, Resilient Infrastructure and Technological Solutions for Disaster Risk Reduction"	National Seminar on "Disaster Risk Reduction in the Himalayas: Recent Advancement s" CSRD. JNU	20-21 September, 2024	90	Chair

35	Conference Presentation	Impact of extreme hydroclimate on Indian Himalayas: an observational study	AOGS 22nd Annual Meeting, Singapore	July 27- August 1, 2025	30	Invited Speaker

Conference Organization/ Presentations (in the last three years)

Organization of a Conference

- *AOGS 2025 Hydrological Science Session HS 32-* ***Hydrometeorological Extreme Events and Disasters: Observational and Model Based Studies (Convenor)***
- *AOGS 2025 Hydrological Science Session HS 36-* ***Sustainable Water Resource Management in a changing Climate (Co-Convenor)***
- *AOGS 2021 Hydrological Science Session HS 25-* **sustainable water Management at the catchment scale in the context of climate variability and climate change.**
- *AOGS 2021 Atmospheric Sciences AS-17 –* **Extreme Events: Observation and Modelling**
- **Convenor**: Internation Conference titled "Geographical Dimensions of Sustainability and Recovery: Social, Cultural, and Environmental Dimensions" held on 3-4 Oct, 2023, University of Delhi

Participation as Paper/Poster Presenter

- *Participated in more than 25 paper presentations at the National and International Level.*
- *Delivered 12 Invited lectures*

Association with Professional Bodies

1. **Journal Editorial Board Member**
   - Scientific Reports
   - Frontiers in Water
   - Discover Applied Sciences
   - Atmosphere
   - Sustainability
2. **Secretary:** Asia Oceania Geoscience Society-HS Session (2020-2026)
3. **Memberships**
   - Asia Oceania Geoscience Society (AOGS)
   - Japan Geophysical Union (JpGU)

Awards and Distinctions

- **JSPS Postdoctoral Fellowship**, Govt. of Japan from 2018-2020
- **Japanese Government Scholarship (MEXT) from April 2009-Sept 2012**.
- Awarded as the **Best Presenter** in JSCE (Japan Society for Civil Engineer International Symposium on 26 August,2011.

Signature of Faculty Member