




FACULTY PROFILE



YOUR NAME HERE

Title	Dr.	First Name	Pyarimohan	Last Name	Maharana	Photograph
Designation	Assistant Professor					
Address	House no: 360A, Street no-6 B-Block, Vasantkunj Enclave New Delhi - 11070					
Phone No. Office						
Mobile	8800282142					
Email	pyarimohan.maharana@dcac.du.ac.in					
Web-Page	https://sites.google.com/view/maharana/home					
Educational Qualifications						
Degree	Institution				Year	
B.Sc.	GM College (Sambalpur University)				2006	
M.Sc.	SES, Jawaharlal Nehru University				2008	
Ph.D.	SES, Jawaharlal Nehru University				2014	
Career Profile						
<ul style="list-style-type: none"> • Dec 2022 – till date: Assistant Professor, Department of Environmental Studies, Delhi College of Arts and Commerce, University of Delhi, Netaji Nagar, New Delhi – 110023 • Jul 2021 – Dec 2022: Faculty, School of Ecology and Environments, Nalanda University, Rajgir, Nalanda, Bihar – 803116 • Oct 2020 – Jul 2021: Assistant Professor (Environmental Sciences), Faculty of Sciences, Sri Sri University, Cuttack, Odisha, India • Research Associate (CSIR), School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India (Changes in the monsoon distribution and the climate extremes over India under 1.5, 2 and 3°C global warming) • Jan 2017 – Nov 2018: Assistant Professor (Guest), Delhi College of Arts and Commerce, University of Delhi, , Netaji Nagar, New Delhi – 110023 • Dec 2014 – Nov 2016: Post-Doctoral Researcher at LMD/IPSL, UPMC, Paris, France. ANR SEEN (Scenario Extreme en Energie Nucleaire) 2 Years 						
Research Interests / Specialization						
Indian Monsoon, Climate Dynamics, Climate Extremes, Climate Projections						
Teaching Experience (Subjects/Courses Taught)						
Courses Taught:						
UG level:						
1. Compulsory Environmental Studies course (DCAC, University of Delhi)						
2. Introduction of Environment, Natural Resource Management and Sustainable Development, Introduction to Biological Environment, Introduction to Physical Environment, Biodiversity and Conservation, Fundamentals of Ecology, Remote Sensing and GIS, Water Resources (Sri Sri University, Cuttack, Odisha)						

PG level:

1. Introduction to Ecology and Environment, Energy and Climate Sciences, Environmental Spheres, Climate Change, Environmental Hydrology, Disaster management, Earth and Environmental Sciences (Nalanda University)
2. Taught (12 foreign students and 11 Indian students) Batch: 2020-2022 (Nalanda University)
3. Taught (13 foreign students and 14 Indian students) Batch: 2021-2023 (Nalanda University)
4. Taught (15 foreign students and 6 Indian students) Batch: 2021-2023 (Nalanda University)
5. Taken additional responsibility to teach two courses (Environmental Pollution and Contaminant Hydrology) in the absence of the concerned faculty at Nalanda University

Courses developed:**UG level:**

1. B.Sc. Environmental Science programme (Sri Sri University, Cuttack, Odisha)
2. Proposed Course Structure for four-year B. Sc. -Hons. (Environmental Science) (Sri Sri University, Cuttack, Odisha)

PG level:

1. Atmospheric and Oceanic processes, Climate Change, Climate Dynamics, Earth system and Planetary Science, Fundamentals of Meteorology, Environmental Data Analytics (Nalanda University)

Research Guidance

1. Nuralfin Anripa, Title – “Nutmeg production in Indonesia under Changing Climate” at Nalanda University (June, 2022)
2. Thandra Karnakar, Title – “Socio-Environmental Impact of E-Rickshaw : A Case Study In Rajgir” at Nalanda University (June, 2022)
3. Ahmed Abdallah Adam Mohamed, Title - “Projected Change In Precipitation And Temperature Over Sudan” at Nalanda University (May, 2023)
4. Kavyayini Narayan Singh, Title – “Assessing the Interlinkages between the Growth Sectors under SDG14 with other SDGs and policy initiatives In India” at Nalanda University (May, 2023)

Publications Profile**Journal articles**

- Maharana, P. (2024). Projected change in the rainfall behaviour over Odisha. *Journal of Water and Climate Change*, 1: 1-14. <https://doi.org/10.2166/wcc.2024.164>
- Ahamed, M. R. A., Maharana, P., & Dimri, A. P. (2024). Elevation dependency of precipitation and temperature over northeast India. *Theoretical and Applied Climatology*, 155(6409-6426). <https://doi.org/10.1007/s00704-024-05019-0>
- Maharana, P., & Dimri, A. P. (2024). Projected energy and hydrological budgets over the Indus River Basin under a CORDEX-SA regional climate model framework. *Atmospheric Research*, 1-14. <https://doi.org/10.1016/j.atmosres.2024.107535>
- Arora, P., Nawaz Ali, S., Singh, P., Shekhar, M., Morthekai, P., Ghosh, R., & Maharana, P. (2024). An assessment of the correlations and causations of palaeo-hydroclimatic variability in India's monsoon-dominated Central Himalaya. *The Holocene*, 1-22. <https://doi.org/10.1177/0959683624125>

- Mohamed, A.A.A., Maharana, P., Phartyal, S.S., & Dimri, A.P. (2024). Projected change in precipitation and temperature over undivided Sudan and its major cities. *Meteorology and Atmospheric Physics*. DOI: 10.1007/s00703-024-01017-z.
- Rani, S., Maharana, P., & Mal, S. (2024). Assessing the Monthly Trends in Precipitable Water Vapor Over the Indian Sub-Continent. *Annals of the American Association of Geographers*. 1-26. <https://doi.org/10.1080/24694452.2023.2294899>
- Dimri, A.P., Yadav, M., Maharana, P., & Suraj Mal (2024). Abating water storage and associated hydrological processes in Indian Himalayan River Basins. *Theoretical and Applied Climatology*. 1-15. <https://doi.org/10.1007/s00704-024-04881-2>
- Maharana, P., Kumar, D., Das, S., Tiwari, P. R., Norgate, M., & Raman, V. A. V. (2023). Projected changes in heatwaves and its impact on human discomfort over India due to global warming under the CORDEX-CORE framework. *Theoretical and Applied Climatology*, 1-12. <https://doi.org/10.1007/s00704-023-04788-4>.
- Mal, S., Agrawal, K., Rani, S., Maharana, P., & Raman, V. A. V. (2023). Evaluating spatial and elevation-wise daytime/nighttime LST trends across the Indus River Basin. *Journal of Mountain Science*, 20(11), 3154-3172. <https://doi.org/10.1007/s11629-023-8157-8>
- Yadav, M., Dimri, A. P., Mal, S., & Maharana, P. (2023). Elevation-dependent precipitation in the Indian Himalayan Region. *Theoretical and Applied Climatology*, 1-14. <https://doi.org/10.1007/s00704-023-04661-4>
- Sharma, A., Dimri, A. P., & Maharana, P. (2023). Intercomparison of CORDEX-CORE and CORDEX-SA model experiments in assessing Indian summer monsoon. *Theoretical and Applied Climatology*, 1-26. <https://doi.org/10.1007/s00704-023-04667-y>
- Anripa, N., Kumar, A., Maharana, P., & Dimri, A. P. (2023). Climate change over Indonesia and its impact on nutmeg production: An analysis under high-resolution CORDEX-CORE regional simulation framework. *International Journal of Climatology*. 1-19. DOI: 10.1002/joc.8098
- Shome, A., Phartyal, S. S., Maharana, P., & Verma, A. (2023). Mapping Peer-Reviewed Scientific Studies on Plant Trait–Service Linkages Across Ecosystems: A Bibliometric Analysis. *Anthropocene Science*, 2(1), 19-30. <https://doi.org/10.1007/s44177-023-00048-2>
- Ghosh, R., Saikia, K., Biswas, O., Agrawal, S., Morthekai, P., Arif, M., Maharana, P. & Bera, S. (2023). Last 10 millennial history of Indian summer monsoon in the Bengal region—a multi-proxy reconstruction from a lacustrine archive. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 609, 111308. <https://doi.org/10.1016/j.palaeo.2022.111308>
- Sharma, A., Maharana, P., Sahoo, S and Sharma, P. (2022) Environmental change and groundwater variability in South Bihar, India. *Groundwater for Sustainable Development*. 19, 1 – 13. <https://doi.org/10.1016/j.gsd.2022.100846>
- Shikha, A., Dimri, A. P., Singh, K. K., Maharana, P., & Mina, U. (2022). Risk assessment and adaptation strategies for irrigated and rainfed cotton crop production under climate change. *Journal of Earth System Science*, 131(4), 267. <https://doi.org/10.1007/s12040-022-01995-x>
- Maharana, P., Kumar, D., Kumar, R., Singh, R. and Dimri, A.P. (2022) Diagnostic of the Massive Flood Event in Tons River Basin. *Theoretical and Applied Climatology*. 148(3-4), 1459-1476. <https://doi.org/10.1007/s00704-022-04008-5>
- Maharana, P., Kumar, D., Kumar, P. and Tiwari, P. (2022) Simulation of Northeast Monsoon in a coupled regional model framework. *Atmospheric Research*. <https://dx.doi.org/10.1016/j.atmosres.2021.105960>.

- Seema Rani, Kumar, R., Acharya, P., Maharana, P. and Singh R (2021) Assessing the Spatial Distribution of Aerosols and Air Quality over the Ganga River Basin during COVID-19 Lockdown Phase-1. Remote sensing applications: Society and Environment. (IF = 0). <https://doi.org/10.1016/j.rsase.2021.100546>
- Shikha, A., Dimri, A.P., Maharana, P., Meena, U. and Singh, K.K. (2021) Evaluating the performance of regional climate model on the irrigated and rainfed cotton crop. 130(4), 1-20. *Journal of Earth System Science*. (IF = 1.423). <https://doi.org/10.1007/s12040-021-01705-z>
- Dimri, A. P., Kumar, P., and Maharana, P. (2021). On the Global Contrasting Temperature-Precipitation Phase Mechanisms in the Last Century. *Journal of Climate Change*, 7(3), 9-21. (IF = 0). DOI: 10.3233/JCC210015
- Maharana, P., Agnihotri, R. and Dimri, A. P. (2021) Changing Indian monsoon rainfall pattern under warming climate. *Climate Dynamics*. 57(9), 2581-2593 (IF = 4.486). <https://doi.org/10.1007/s00382-021-05823-8>.
- Sahu, B. and Maharana, P. (2021) Reducing local warming and energy conservation through alteration of surface reflectance properties. *Journal of Climate Change*, 7(2), 63-72. (IF = 0). DOI 10.3233/JCC210012
- Shahi, N., Das, Sushant., Ghosh, S., Maharana, P. (2021) Projected changes in the mean and intra-seasonal variability of Indian summer monsoon in the RegCM CORDEX-CORE simulations under higher warming conditions. *Climate Dynamics*, 57(5), 1489-1503 (IF = 4.486). <https://doi.org/10.1007/s00382-021-05771-3>
- Kumar, R., Seema Rani, Maharana, P. (2021) Assessing the Impacts of Amphan Cyclone over West Bengal, India: A Multi-Sensor Approach. *Environmental Monitoring and Assessment* 193(5), 1-21. (IF = 1.959). <https://doi.org/10.1007/s10661-021-09071-5>
- Dimri, A. P., Allen, S., Huggel, C., Mal, S., Ballesteros-Cánovas, J. A., Rohrer, M., Maharana, M.,... & Pandey, A. (2021). Climate change, cryosphere and impacts in the Indian Himalayan Region. *Current Science*, 120(5), 774-790. (IF = 0.756). DOI:10.18520/cs/v120/i5/774-790
- Maharana, P., Kumar, D., Das, S., and Tiwari P.R. (2021) Present and future changes in precipitation characteristics during Indian summer monsoon in CORDEX-CORE simulations. *International Journal of Climatology*, 41(3), 2137-2153, (IF = 3.928). <https://doi.org/10.1002/joc.6951>
- Seema Rani, Suraj Mal, Maharana, P. (2020). Estimation of Spatio-Temporal Variability in Land Surface Temperature over the Ganga River Basin using MODIS data. *Geocarto International*, 1-23. (IF = 2.365). <https://doi.org/10.1080/10106049.2020.1869331>
- Maharana, P., Dimri, A.P. and Choudhary, A. (2019) Future changes in Indian summer monsoon characteristics under 1.5 and 2 °C specific warming levels. *Climate Dynamics*, 54 (1-2), 507 – 523, (IF = 4.486). <https://doi.org/10.1007/s00382-019-05012-8>
- Maharana, P., Kumar, D. and Dimri, A.P. (2019) Assessment of coupled regional climate model (RegCM4.6–CLM4.5) for Indian summer monsoon. *Climate Dynamics*, 53(11), 6543-6558 (IF = 4.486). <https://doi.org/10.1007/s00382-019-04947-2>
- Shikha, A., Singh, K.K., Dimri, A.P., Niwas, R. and Maharana, P. (2019) Model-based approach to study the response of Bt-cotton towards elevated temperature and carbon dioxide in the semi-arid region of Hisar. *Journal of Climate Change*, 5(2), 35-50. (IF = 0) DOI: 10.3233/JCC190011
- Pattnayak, K.C., Abdel-Lathif, A. Y., Rathakrishnan, K. V., Singh, M., Dash, R. and Maharana, P. (2019) Changing Climate over Chad: Is the Rainfall over the Major Cities

Recovering? Earth and Space Science, 6(7), 1149-1160. (IF = 2.15). DOI: 10.1029/2019EA000619.

- Maharana, P., and Dimri, A.P. (2019). Monsoon: Past, present and future. Proceedings Indian National Science Academy, 2: 1-18. (IF = 0). DOI: 10.16943/ptinsa/2018/49514.
- Maharana, P., Dimri, A.P. and Choudhary, A. (2019). Redistribution of Indian Summer Monsoon by dust aerosols forcing. Meteorological Application. 26(4), 584-596. (IF = 1.685). <https://doi.org/10.1002/met.1786>
- Shikha, A., Dimri, A. P., Maharana, P., Singh, K. K., and Niwas, R. (2018). Cotton crop in changing climate. Current Science (00113891), 115(5). (IF = 0.756). DOI: 10.18520/cs/v115/i5/948-954
- Dimri, A. P., Kumar, D., Choudhary, A., and Maharana, P. (2018). Future changes over the Himalayas: Maximum and minimum temperature. Global and Planetary Change, 162, 212- 234. (IF = 4.448). <https://doi.org/10.1016/j.gloplacha.2018.01.015>
- Dimri, A. P., Kumar, D., Choudhary, A., and Maharana, P. (2018). Future changes over the Himalayas: Mean temperature. Global and Planetary Change. 162: 235-251. (IF = 4.448). <https://doi.org/10.1016/j.gloplacha.2018.01.014>
- Maharana, P., A.Y. Abdel-Lathif and Pattnayak, K.C. (2018) Observed climatic variability over chad using multiple observational and multiple datasets. Global and Planetary Change 162: 252-265. (IF = 4.448). <https://doi.org/10.1016/j.gloplacha.2018.01.013>
- Choudhary, A., Dimri, A. P., and Maharana, P. (2017). Assessment of CORDEX-SA experiments in representing precipitation climatology of summer monsoon over India. Theoretical and Applied Climatology, 134 (1-2), 283-307. (IF = 2.882), <https://doi.org/10.1007/s00704-017-2274-7>
- Maharana, P., and Dimri, A. P. (2016). Study of intraseasonal variability of Indian summer monsoon using a regional climate model. Climate Dynamics 46(3-4), 1043-1064. (IF = 4.486). DOI <https://doi.org/10.1007/s00382-015-2631-0>
- Maharana, P., and Dimri, A. P. (2014). Impact of initial and boundary conditions on regional winter climate over the Western Himalayas: A fixed domain size experiment. Global and Planetary Change, 114, 1-13. (IF = 4.448). <https://doi.org/10.1016/j.gloplacha.2013.12.011>
- Maharana, P., and Dimri, A.P. (2014). Study of seasonal climatology and interannual variability over India and its sub-regions using a regional climate model (RegCM3). Journal of Earth System Sciences, 113(5), (1147-1169). (IF = 1.423). DOI: <https://doi.org/10.1007/s12040-014-0447-7>
- Dimri, A.P., and Maharana, P. (2012). Inter-annual variability of precipitation simulated by RegCM3 over India and Indian Himalayas. Vayumandal, 38 (104), 70-80. (IF = 0).

Book Chapters

- Rani S., Kumar R. and Maharana P. (2022) Climate Change, Its Impacts, and Sustainability Issues in the Indian Himalaya: An Introduction, In Book: Climate Change Impacts, Responses and Sustainability in the Indian Himalaya, (Eds. Rani and Kumar), pp.1-28, ISBN-978-3-030-92781-3, Springer Nature Switzerland, <https://doi.org/10.1007/978-3-030-92782-0>
- Kumar S, Maharana P. (2020). Air quality and its impact on urban environment. In book: Urban Ecology: emerging patterns ad socio-ecological systems, (Eds. P. Verma et al.), pp. 185-199, ISBN-9 78-0-12-820730-7, Elsevier Amsterdam, Netherlands. <https://doi.org/10.1016/B978-0-12-820730-7-00011-2>

- Kumar, R., Pandey, P.C., Maharana, P., Gautam, H. and Pandey, V.K. (2019). Assessing the impact of climate variability and land use on open water bodies of middle Ghagra river basin. Book chapter In book: Water Conservation, Recycling and Reuse: Issues and Challenges, (Eds. R.P. Singh et al.), pp. 185-202, ISBN-978-981-13-3179-4, DOI:10.1007/978-981-13-3179-4_10, Springer Singapore.
- Maharana, P., Dimri, A. P., and Choudhary A. (2016) Effect of dust in Indian Summer Monsoon. In book: Geostatistical and geospatial approaches for the characterization of natural resources in the environment: challenges, processes and strategies. (Eds. N.J. Raju et al.), pp. 855-859, ISBN-978-3319186627, DOI-10.1007/978—3-319-186634, Springer Cham
- Dimri, A.P., and Maharana, P. (2013). Regional Climate modelling over the Himalayas. In book: Management of water, energy and bio-resources in the era of climate change: emerging issues and challenges (Eds. N.J. Raju et al.), pp. 339-355, ISBN – 978938189106, Springer Cham

Conference Organization/ Presentations

- Invited lecture **(02-05-23)** on ““Projected Energy and Hydrological Budgets over the Indus River Basin under a Regional Climate Model Framework” on two-days national workshop on “Impact of Climate change on water resources of Upper Indus River Basin- An UIBN initiative” 1st May – 2nd May 2023” organized by University of Kashmir, Srinagar, Jammu And Kashmir.
- Invited lecture **(01-09-22)** on ““Indian monsoon under changing climate” on the theme Theme: Climate change prediction and modelling on "Online One Month Certificate Course on “Basics of Remote Sensing Application in Climate Change Modelling” 18th August – 19th September 2022” organized by Amity University and IMD, New Delhi.
- Invited lecture **(18-01-21)** on "Indian monsoon under changing climate" in the refresher course on “Geography and Earth Sciences”, 12 -25 January, 2022, organized by UGC-HumanResource Development Center, Doctor, Hari Singh Gaur Vishwavidyalaya, Sahar, MP, India
- Organised a seminar (as coconvenor) on “ DRR in Himalayas: recent advancements” at JNU
- Invited as a Jury Member during the School Students' Conference held on October 06, 2023, organized under the auspices of DUSF'22 x HMUNEA'23, focusing on the theme "Youth and Sustainable Practices." at Shaheed Bhagat Singh College, University of Delhi.
- Invited as an external examiner for conducting the practical examination of “Prospecting E- Waste for Sustainability”, Skill Enhancement Paper held on 9 July 2023.
- Participated in two-days national workshop on “Impact of Climate change on water resources of Upper Indus River Basin- An UIBN initiative” 1st May – 2nd May 2023” organized by University of Kashmir, Srinagar, Jammu And Kashmir.
- E-workshop on “Statistics with R Programming” (4 Sep - 5 Sep’ 2021), Commacad.
- Oral presentation on “Heat stress over the Indian Himalayan region” on national virtual symposium on “Weather and Climate services over the mountainous region (TROPMET – 2020) ” (14 Dec – 17 Dec’ 2020, organised jointly by North Eastern Space application

center and Indian meteorological society shilling Chapter)

- Poster presented on “Effect of changing domain, initial and boundary conditions over regional climate over the western Himalayas” in International Humboldt kolleg on “Management of water, energy and bio-resources in changing climate regime: emerging issues and environmental challenges” (Feb. 8-9. 2013, Jawaharlal Nehru University, New Delhi, India).
- Oral presentation on “Interannual variability of precipitation simulated by RegCM3 over Indian Himalayas.” At TROPMET-2012. (Nov.20-22., 2012, Indian Institute of Remote Sensing, Dehradun, India).
- Poster presented on “Comparison of RegCM3 simulated rainfall and temperature with station data over western Himalayas” in “Conference on the Role of e-infrastructures for Climate Change Research” (May 16-20, 2011, Miramare, Trieste, Italy).
- Attended pre-symposium tutorial on “Satellite observations for regional climate modelling” organized by Indian Meteorological Society, Dehradun chapter. (Nov. 18-19., 2012, Indian Institute of Remote Sensing, Dehradun, India).
- Attended Highnoon Spring School on “Adaptation to changing water resources availability in northern India with Himalayan glacier retreat and changing monsoon pattern.” (Apr. 2-6, 2012, Department of Civil Engineering, Indian Institute of Technology, New Delhi, India).
-
- Attended national seminar on “Environmental pollution and bioremediation” (Dec. 28-29, 2011, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India).
- Participated on the National seminar on “Morden and Paleo Sediments: Implication to Climate, Water Resources and Environmental Changes” (Nov. 24-26, 2011, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India).
- Attended SERC School on “Dynamics and forecasting of Indian Summer Monsoon.” (27th Jun. - 20th Jul., 2011, Center of Atmospheric Sciences, Indian Institute of Technology, New Delhi, India).
- Participated on short-term course under continuing education Programme on “Aerosol. Health, regional air quality and Climate.” (Apr. 01-04, 2011, Department of Civil Engineering, Indian Institute of Technology, New Delhi, India).
- Attended in RegCM4.0 training course during the “International EU-IndiaGrid2 with special focus on Material science, Climate change and Interoperability” (Dec. 13-16, 2010, Indian Institute of Technology, New Delhi, India).
- Participated in national seminar “Bio Epoch-2009.” (Apr. 03-04, 2009, School of Biotechnology, Jawaharlal Nehru University, New Delhi, India).
- Attended International conference on “Coastal zones environment and sustainable development, vulnerability, adaptation and beyond.” (Feb. 12-14, 2007, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India).

<ul style="list-style-type: none"> Participated in National Symposium on “Searching missing links conservation and management for sustainable development of environment.” (Feb. 2, 2007, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India).
Administrative Assignments
<ol style="list-style-type: none"> Member, Internal Quality Assurance Cell (IQAC), DCAC, University of Delhi Member, Election Committee, DCAC, University of Delhi Member, Green Committee, DCAC, University of Delhi Member, Infrastructure Committee, DCAC, University of Delhi Member, Canteen Committee, DCAC, University of Delhi Member, Sports Committee, DCAC, University of Delhi Student Mentor, DCAC, University of Delhi Criteria Convener, NAAC Committee, DCAC, University of Delhi Convener, Prakriti – The Environmental Society, DCAC, University of Delhi Former Semester Coordinator, School of Ecology and Environment Studies, Nalanda University Former Member, Admission Committee, Nalanda University
Research Projects (Major Grants/Research Collaboration)
NA
Awards and Distinctions
<ul style="list-style-type: none"> CSIR (Centre for Scientific and Industrial Research) Research Associate in Environmental Sciences (2019) CSIR (Centre for Scientific and Industrial Research) - Senior Research Fellowship and National Eligibility Test for Lectureship (Earth, Atmospheric, Ocean and Planetary Sciences) and called for SPMF Interview (Shyama Prasad Mukherjee Fellowship) conducted by CSIR, India UGC (University Grants Commission) - National Eligibility Test for Lectureship (Environmental Sciences) Chandrasekhar Prasad Scholarship – Jawaharlal Nehru University (2007 -2008)
Association With Professional Bodies
<p>Member: International association for Water, Environment, Energy and Society (IIAWEEES) (2020)</p> <p>Life member: Indian Science Congress Association (L37891), Indian Meteorological Society (LM-3495)</p>
Other Activities
Lead (Thematic working group – II: Climate change, air pollution variability and blackcarbon), Upper Indus Basin Network (UIBN)-India Country (IC) Chapter

Signature of Faculty Member