

Dr. Ankit Tandon:

Designation: Associate Professor
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**Education**

- **Diploma of European Research Course on Atmospheres - 2011**, Universite Joseph Fourier, France (Jan, 2011 - Feb, 2011)
- **Ph.D.**, Environmental Sciences, **Jawaharlal Nehru University** (2008)
Topic: “**Statistical Analysis of Ozone Column over India**”
[Supervisor: Prof. Arun K. Attri]
- **M.Sc.**, Environmental Sciences, **Jawaharlal Nehru University** (2003)
[FGPA 7.56 on 0-9 scale]
M.Sc. Dissertation Title: “**Sensitivity Analysis of Simplified Model of Tropospheric Ozone Formation**”

Academic & Research Profile [Post Ph.D. Experience: 15 Years]

- **Associate Professor**, Department of Environmental Sciences, **Central University of Jammu**, (Dec., 2024 – current position)
- **Assistant Professor**, Department of Environmental Sciences, **Central University of Jammu**, (Nov., 2023 – Nov., 2024)
- **Assistant Professor**, Department of Environmental Sciences, **Central University of Himachal Pradesh**, (Nov., 2012 – Nov. 2023)
- **Postdoctoral Visiting Scholar**, MEAS, **NC State University**, USA (Sep., 2017 – Feb., 2018)
Project Title: “**Influence of particle morphology and mixing state on the water uptake and cloud forming properties of sub-200 nm particle**”
- **Assistant Professor** (on contract), Department of Ecology and Environmental Sciences, **Central University of Jammu**, (Aug., 2012 – Nov., 2012)
- **DST Young Scientist**, School of Environmental Sciences, **Jawaharlal Nehru University** (Dec., 2009 – Nov., 2012)
- **Research Associate**, School of Environmental Sciences, **Jawaharlal Nehru University** (Dec, 2008 - Nov, 2009)

Research Areas:**Atmospheric Chemistry and Physics:**

- Atmospheric Aerosols
- Atmospheric Trace Gases
- Air-Quality and Environmental Health
- Climate Dynamics

Research Projects as Principal Investigator:

- Project Title: “**Thermodynamic evolution of secondary inorganic aerosols in Dhauladhar region of the North-Western Himalaya**” funded by SERB, DST under Core Research Grant (₹ 55.29 Lakhs)
- Project Title: “**Developing Emission Inventory for Non-Attainment Cities of India**” funded by Centre for Study of Science, Technology and Policy (CSTEP) (₹ 13.17 Lakhs)
- Project Title: “**Water Conservation and harvesting strategies vision: To ensure water security and its sustainable use, conservation and management in the Himalayan region**” funded by University Grants Commission (UGC) under Thematic Studies being conducted by the Consortium of Central Universities in Himalayan States (₹ 3.03 Lakhs)
- Project Title: “**Investigation of the Aerosol Dynamics and Development of a Technique to Determine the Baseline Aerosol Load in Urban Atmosphere**” funded by DST (₹ 24.72 Lakhs)

Research Projects as Project Partner:

- Project Title: “**ICE nuCleatingpaRticle and cloUd condensation NuClei properties in the north-western Himalayas (ICE-CRUNCH)**” funded by SNSF & MoES, under Indo-Swiss Collaborative Research - (CHF 349'925 + ₹ 150.01 Lakhs)

Ph.D. Students Supervised:

Bikram Sen Sahu (As Co-Supervisor)	<i>Analysis of Long-term Variability in Total Ozone Column and Erythemat Ultra-Violet Radiation over Indian Region : Their Functional Relationship with Atmospheric Factors</i>	Jawaharlal Nehru University
Deepika Kaushal (As Supervisor)	<i>Study of Water-Soluble Ionic and Carbonaceous Species Associated with Ambient Aerosols in District Kangra, Himachal Pradesh</i>	Central University of Himachal Pradesh
Ashish Dogra (As Supervisor)	<i>Studies on Long-term Variations in Rainfall Characteristics over Indian regions</i>	Central University of Himachal Pradesh
Sarita Bamotra (As Supervisor)	<i>Studies on Mass Closure and Source Apportionment of PM_{2.5} Aerosol in Jammu City of J&K (UT) India</i>	Central University of Himachal Pradesh
Chhabeel Kumar (As Supervisor)	<i>Studies on Ozone Dynamics over Indian region</i> (Thesis Submitted)	Central University of Himachal Pradesh

Ph.D. Students Under-Supervision & Current Research Interests

<i>Candidate</i>	<i>Proposed Title of Ph.D. Thesis</i>	<i>Area of Research</i>
Abinash (As Co-Supervisor)	<i>Studies on Secondary Inorganic Aerosols in Dhauladhar region of the North-Western Himalaya</i>	<i>Aerosol Chemistry</i>
Neha Gadgotra (As Supervisor)	<i>Studies on Secondary Aerosol Dynamics at a Background Location in Jammu region of the North-Western Himalaya</i>	<i>Aerosol Chemistry</i>

Editorial Responsibilities:

1. Associate Editor of Water, Air, & Soil Pollution, An International Journal of Environmental Pollution published by Springer.

Publications:

International Peer Reviewed Journals: 27

h-index: 12*

Book Chapters: 2

i10-index: 13*

*Source: Google Scholar (As on 18.03.2025)

List of Publications in International Peer Reviewed Journals:

27. Kumar, C., **Tandon, A.**, 2024, Deciphering multi-temporal scale dynamics in the concentration, sources and processes of near surface ozone over different climatic regions of India, **Environmental Science and Pollution Research**, 31, 34709–34725, <https://doi.org/10.1007/s11356-024-33470-z>
[ISSN: 1614-7499; Springer Verlag; Cite Score: 8.5]

26. Kumar, C., Dogra, A., Kumari, N., Yadav, S., **Tandon, A.**, 2024, Multi-time-scale surface ozone exposure and associated premature mortalities over Indian cities in different climatological sub-regions, **Air Quality, Atmosphere & Health**, <https://doi.org/10.1007/s11869-024-01547-w>
[ISSN: 1873-9326; Springer Verlag; Impact factor: 2.9]

25. Dogra, A., Thakur, J., & **Tandon, A.**, 2023, Do satellite-based products suffice for rainfall observations over data-sparse complex terrains? Evidence from the North-Western Himalayas, **Remote Sensing of Environment**, 299, 113855. <https://doi.org/10.1016/j.rse.2023.113855>
[ISSN 0034-4257; Elsevier; Cite Score:25.1; Impact Factor: 11.1]

24. Dogra, A., Kumar, C. & **Tandon, A.**, 2023, Utilizing advanced and modified conventional trend methods to evaluate multi-temporal variations in rainfall characteristics over India, **Theoretical and Applied Climatology**. <https://doi.org/10.1007/s00704-023-04640-9>
[ISSN: 1434-4483; Springer Verlag; Impact Factor: 2.8]

23. Nair, P., Vaishnav, D.K., **Tandon, A.**, 2022, The Paradoxes of Climate Change Reporting: A study of landslide news stories published in Hindi language newspapers of Himachal Pradesh, India, **The Journal of Development Communication**, 33 (2), 30-43.

[ISSN: 0128-3863; Asian Institute for Development Communication (Aidcom)]

22. Bamotra, S., Kaushal, D., Yadav, S., **Tandon, A.**, 2022, Variations in the concentration, source activity, and atmospheric processing of PM_{2.5}-associated water-soluble ionic species over Jammu, India, **Environmental Monitoring and Assessment**, 194, 601. <https://doi.org/10.1007/s10661-022-10249-8>

[ISSN:1573-2959; Springer Verlag; Impact Factor: 2.9]

21. Yadav, S., Curtis, N. P., Venezia, R. E., **Tandon, A.**, Paerl, R. W., Petters, M. D., 2022, Bioaerosol diversity and Ice nucleating particles in the North-Western Himalayan Region, **Journal of Geophysical Research: Atmospheres**, 127, e2021JD036299. <https://doi.org/10.1029/2021JD036299>

[ISSN:2169-8996; American Geophysical Union; Cite Score: 7.3; Impact Factor: 3.8]

20. Kumar, C., Dogra, A., Yadav, S., **Tandon, A.**, Attri, A. K., 2022, Apportionment of long-term trends in different sections of total ozone column over tropical region, **Environmental Monitoring and Assessment**, 194 (4), 298. <https://doi.org/10.1007/s10661-022-09980-z>

[ISSN:1573-2959; Springer Verlag; Impact Factor: 2.9]

19. Sahu, B. S., Maharana, P., **Tandon, A.**, Attri, A. K., 2021, Surface Reflectance Change can Induce Reduction in the Surrounding Ambient Environment Warming, **Journal of Climate Change**, 7 (2), 63-72. <https://doi.org/10.3233/JCC210012>

[ISSN: 2395-7697; IOS Press; Impact Factor: 0.7]

18. Kaushal, D., Bamotra, S., Yadav, S., Chatterjee, S., **Tandon, A.**, 2020, Particulate bound Polycyclic Aromatic Hydrocarbons over Dhauladhar region of North-Western Himalayas, **Chemosphere**, 263 (2021), 128298, <https://doi.org/10.1016/j.chemosphere.2020.128298>.

[ISSN: 1879-1298; Elsevier; Cite Score: 15.8]

17. Yadav, R. et al., 2020, Comparison of ambient air pollution levels of Amritsar during foggy conditions with that of five major north Indian cities: Multivariate analysis and air mass back trajectories, **S. N. Applied Sciences**, 2 (11), 1-11. <https://doi.org/10.1007/s42452-020-03569-2>

[ISSN: 2523-3971; Springer-Nature; Cite Score:7; Impact Factor: 2.8]

16. Kaushal, D., Yadav, S., **Tandon, A.**, 2020, Water-soluble ionic species in atmospheric aerosols over Dhauladhar region of North-Western Himalaya. **Environmental Science and Pollution Research**, 89, 1-13. <https://doi.org/10.1007/s11356-020-10117-3>

[ISSN: 1614-7499; Springer Verlag; Cite Score: 8.5]

15. Kaushal, D., Bamotra, S., Yadav, S., **Tandon, A.**, 2020, Aerosol-associated n-alkanes over Dhauladhar region of North-Western Himalaya: seasonal variations in sources and processes, **Environmental Monitoring and Assessment**, 192 (8), 1-18. <https://doi.org/10.1007/s10661-020-08483-z>

[ISSN:1573-2959; Springer Verlag; Impact Factor: 2.9]

14. Yadav, S., Bamotra, S., **Tandon, A.**, 2020, Aerosol-associated non-polar organic compounds (NPOCs) at Jammu, India, in the North-Western Himalayan Region: seasonal variations in sources and processes. **Environmental Science and Pollution Research**, 27, 18875-18892. <https://doi.org/10.1007/s11356-020-08374-3>
[ISSN: 1614-7499; Springer Verlag; Cite Score: 8.5]
13. **Tandon, A.**, Rothfuss, N.E., Petters, M.D., 2019, The effect of hydrophobic glassy organic material on the cloud condensation nuclei activity of internally mixed particles with different particle morphologies, **Atmospheric Chemistry and Physics**, 19, 3325-3339. <https://doi.org/10.5194/acp-19-3325-2019>
[ISSN 1680-7324; Copernicus Publications; Cite Score: 10.7; Impact Factor: 5.2]
12. Kaushal, D., Kumar, A., Yadav, S., **Tandon, A.**, Attri, A.K., 2018, Winter-time carbonaceous aerosols over Dhauladhar region of North-Western Himalayas, **Environmental Science and Pollution Research**, 25 (8), 8044-8056. <https://doi.org/10.1007/s11356-017-1060-5>
[ISSN: 1614-7499; Springer Verlag; Cite Score: 8.5]
11. Sahu, B.S., **Tandon, A.**, Attri, A.K., 2017, Roles of ozone depleting substances and solar activity in observed long-term trends in total ozone column over Indian region, **International Journal of Remote Sensing**, 38 (18), 5091-5105. <https://doi.org/10.1080/01431161.2017.1333654>
[ISSN: 1366-5901; Taylor & Francis; Cite Score: 7; Impact Factor: 3.0]
10. Yadav, S., **Tandon, A.**, Tripathi, J.K., Yadav, S., Attri, A.K., 2016, Statistical assessment of respirable and coarser size ambient aerosol sources and their timeline trend profile determination: A four year study from Delhi, **Atmospheric Pollution Research**, 7 (1), 190-200. <https://doi.org/10.1016/j.apr.2015.08.010>
[ISSN: 1309-1042; Elsevier BV; Cite Score: 8.3; Impact Factor: 3.9]
9. Yadav, S., **Tandon, A.**, Attri, A.K., 2014, Timeline trend profile and seasonal variations in nicotine present in ambient PM₁₀ samples: A four year investigation from Delhi region, India, **Atmospheric Environment**, 98, 89-97. <https://doi.org/10.1016/j.atmosenv.2014.08.058>
[ISSN: 1352-2310; Elsevier BV; Cite Score: 9.4; Impact Factor: 4.3]
8. Yadav, S., **Tandon, A.**, Attri, A.K., 2013b, Characterization of aerosol associated non-polar organic compounds using TD-GC-MS: A four year study from Delhi, India, **Journal of Hazardous Materials**, 252-253, 29-44. <https://doi.org/10.1016/j.jhazmat.2013.02.024>
[ISSN: 0304-3894; Elsevier BV; Cite Score: 25.4; Impact Factor: 12.2]
7. **Tandon, A.**, Yadav, S., Attri, A.K., 2013, Non-linear analysis of short term variations in ambient visibility, **Atmospheric Pollution Research**, 4 (2), 199-207. <https://doi.org/10.5094/APR.2013.020>

[ISSN: 1309-1042; Elsevier BV; Cite Score: 8.3; Impact Factor: 3.9]

6. Yadav, S., **Tandon, A.**, Attri, A.K., 2013a, Monthly and seasonal variations in aerosol associated n-alkane profiles in relation to meteorological parameters in New Delhi, India, **Aerosol and Air Quality Research**, 13 (1), 287-300.
<https://doi.org/10.4209/aaqr.2012.01.0004>

[ISSN: 1680-8584; AAGR - Taiwan Association of Aerosol Research; Impact Factor: 2.5]

5. **Tandon, A.**, Yadav, S., Attri, A.K., 2012, Analysis of annual cyclic variations in total ozone column over Indian region, **Journal of Atmospheric Chemistry**, 69 (4), 321-335.
<https://doi.org/10.1007/s10874-012-9243-4>

[ISSN: 1573-0662; Kluwer Academic Publisher; Impact Factor: 3.0]

4. **Tandon, A.**, Attri, A.K., 2011, Trends in total ozone column over India: 1979-2008, **Atmospheric Environment**, 45 (9), 1648-1654.
<https://doi.org/10.1016/j.atmosenv.2011.01.008>

[ISSN: 1352-2310; Elsevier BV; Cite Score: 9.4; Impact Factor: 4.3]

3. **Tandon, A.**, Yadav, S., Attri, A.K., 2010, Coupling between meteorological factors and ambient aerosol load, **Atmospheric Environment**, 44 (9), 1237-1243.
<https://doi.org/10.1016/j.atmosenv.2009.12.037>

[ISSN: 1352-2310; Elsevier BV; Cite Score: 9.4; Impact Factor: 4.3]

2. Yadav, S., **Tandon, A.**, 2008, Correlation between Ground Level Ultra-Violet Radiation & Lower Atmospheric Aerosol Load, **Nature Precedings**, 1-1.
<https://doi.org/10.1038/npre.2008.2677.1>

[ISSN: 1756-0357; NPG]

1. **Tandon, A.**, Yadav, S., Attri, A.K., 2008, City-wide sweeping a source for respirable particulate matter in the atmosphere, **Atmospheric Environment**, 42 (6), pp. 1064-1069.
<https://doi.org/10.1016/j.atmosenv.2007.12.006>

[ISSN: 1352-2310; Elsevier BV; Cite Score: 9.4; Impact Factor: 4.3]

Book Chapters:

1. Chatterjee, S., **Tandon, A.**, 2020, Climate Change Impact on Eco-biology and Socio-economy—A Concise Discussion. In: Roy, N., Roychoudhury, S., Nautiyal, S., Agarwal, S., Bakshi, S. (eds) Socio-economic and Eco-biological Dimensions in Resource use and Conservation. Environmental Science and Engineering. Springer, Cham.
https://doi.org/10.1007/978-3-030-32463-6_25

2. Kumar, C., Yadav, S., **Tandon, A.**, 2025, Effect of Heat Wave Events on Air-Quality: Implications for Environmental Health. In: Air Pollution and Related Health Risks., Elsevier
<https://doi.org/10.1016/B978-0-443-23965-6.00017-4>

Curricular/Examination/Administrative Responsibilities

- Member of Directorate of Internal Quality Assurance, Central University of Jammu
- Member of a University level committee at Central University of Jammu to work on the process to participate in various world ranking
- Nodal Faculty from Central University of Himachal Pradesh (Institute of Repute) for National Clean Air Programme
- Deputy Centre Superintendent to conduct Entrance Examination of the Central University of Himachal Pradesh.
- University Observer to conduct HPKVSPAAP
- Member of Proctorial Board for the Shahpur Campus of the Central University of Himachal Pradesh.
- Member of University Level Committee to Prepare Self-Assessment Report for NAAC Accreditation
- Member of School Board of the School of Earth and Environmental Sciences, Central University of Himachal Pradesh
- Member of Board of Studies of the Department of Environmental Sciences, Central University of Himachal Pradesh