Dr. Ajay Kumar (M.Sc. Ph.D.)
Assistant Professor
Department of Environmental Science & Technology
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Positions:

- Assistant Professor in Department of Environmental Science & Technology, Central University of Punjab since Feb, 2020.
- Assistant Professor in Central University of Jammu, Jammu (On Contract) from July 2018-May 2019.
- Assistant Professor in Dayalbagh Educational Institute, Agra from Feb, 2017-July 2019.

Educational Qualification:

PhD	School of Environmental Sciences, Jawaharlal Nehru University, New Delhi. Thesis title 'Characterization of Biological material and Organic compounds associated with the ambient aerosols in the foothills of Western Himalaya'.
Master of Science:	Banaras Hindu University, Varanasi-221005, India.
Bachelor of Science:	W.R.S. Govt College, HPU, Shimla (H.P).

Awards and Fellowships:

1. CSIR-UGC National Eligiblity Test and Junior Research Fellowship.
2. Junior Research Fellowship offered by University Grant Commission for research in BHU.
3. Graduate Aptitude Test for Engineering (GATE) qualified in 2010.
4. Dr. B.R. Ambedkar Scholarship in 11th Class in 2001.

Research Publications in Peer Reviewed International Journals:

1. Kaushal, D., **Kumar, A.,** Yadav, S., Tandon, A., Attri, A.K., Wintertime carbonaceous aerosols over Dhauladhar region of North-Western Himalayas. Environmental Science and Pollution Research, (2018) Volume 25, Issue 8, pp 8044-8056.https://doi.org/10.1007/s11356-017-1060-5.

2. Kumar, A., Attri, A.K., Characterization of fungal spores in ambient particulate matter: A study from the Himalayan region. Atmospheric Environment (2016) 142, 182-193.doi:10.1016/j. atmosenv.2016.07.049.

3. **Kumar, A.,** Attri, A.K. Biomass Combustion a Dominant Source of Carbonaceous Aerosols in the Ambient Environment of Western Himalayas. Aerosol Air Qual Res (2016) 16, 519-529. doi: 10.4209/aaqr.2015.05.0284.
4. **Kumar, A.,** Attri, A.K., Correlating respiratory disease incidences with corresponding trends in ambient particulate matter and relative humidity, Atmospheric Pollution Research (2016), 7, 858-864.http://dx.doi.org/10.1016/j.apr.2016.05.005.

Publications under submission/preparation

1. Kumar, A., Chauhan, M.S., Attri, A.K. Seasonal variability in abundance and diversity of pollens in the Western Himalayas. Submitted.
2. Kumar, A., Attri, A.K. Temporal variability in the composition of ionic species in the PM10 aerosols in rural environment of Western Himalaya. Ready for submission.
3. Kumar, A., Attri, A.K. Chemical characterization of polar and non-polar organic aerosols collected from the Western Himalaya. Under preparation.

Conferences Attended/Poster/Oral Presentations

1. Participated in National Symposium on Current challenge in Plant Sciences: Gene to Ecosystem, at Banaras Hindu University, on March 24-25, 2009. (National)
2. Participation/Volunteer in International Symposium on Phycological Reasearch, at Banaras Hindu University, on February 25-27, 2010. (International)
3. Participated in National Seminar on Nuclear energy in national Development, on 24 March, 2010. (National)
4. Ajay Kumar, Ankit Tandon and Arun K. Attri. Poster presented on 'Leaf reflectance variation due to Particulate matter deposition and implications on leaf biological activity' in National Seminar of Environmental Polluton and Mitigation Strategies in March, 2012. (National)
5. Ajay Kumar, Arun K. Attri. 'Temporal Profile of PM_{10} associated carbon fraction in the foothills of Western Himalayas with reference to region's meteorology' Oral Presentation in national conference on Implication of Climate change on Himalayan Environment in March, 2014.(National)
6. Ajay Kumar, Arun K. Attri. Biomass Combustion a Dominant Source of carbonaceous Aerosols in the Ambient Environment of Western Himalayas. Special Issue on Aerosol & Air Pollution. BiogeochemEnvis vol.21(1), 2015-16.

Trainings/ Short Cources Attended

1. Aerosol Properties: Health, Regional, Air quality and climate in IIT Delhi from 1st April-5th April 2011
2. UGC-NRCBS 15 days winter school on 'Recent Trends in Applied Ecology' in Madurai Kamaraj Unviersity, Madurai from Aug 25th – 8th Sept 2011.
3. Workshop on Data analysis using SPSS in Jawaharlal Nehru University, New Delhi, May 2014.
4. Winter School on Atmospheric Aerosol Physics, Measurements, and Sampling Techniques' from 16th-19th Feburary 2016 in IIT, Madras.

Research Area

My research studied characterization of biological matterial (pollens and spores), and carbonaceous aerosols, ionic species, and organic aerosols suspended in air; they are play an important in regulation of climate, directly correlated to public health and agricultural productivity. The study of chemical compostion of particulate matter covering time span of 14 months in Western Himalaya provide a significant information to the scientifc community. Three publications of the work are already published in peer reviewd journals and few more are in progress. We also published a paper studying the affect of particulate matter on human health using regional health data.

[Ajay Kumar]