Dr. Shweta Yadav

[Fulbright Alumna & INYAS member]

Scopus ID: 55490421700 **ORCID ID:** https://orcid.org/0000-0002-7455-6461

Designation: Associate Professor, Department of Environmental Sciences, Central University of Jammu, Jammu and Kashmir, India.

Institutional Responsibilities:

- Associate Dean, International Affairs, Central University of Jammu, Jammu and Kashmir, India.
- Centre In-charge, Himalayan High Altitude Atmospheric and Climate Research Centre, District Udhampur, Central University of Jammu, Jammu and Kashmir, India.
- Warden, Shailputri Bhawan Girls Hostel, Samba, Central University of Jammu, Jammu and Kashmir, India.

Adjunct Faculty:

- Environmental Engineering Division, Department of Civil Engineering, IIT Madras, Chennai, India

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Education

Postdoctoral Research (Atmospheric Science), MEAS, NCSU, Raleigh, NC, USA (2017-2018)

[Project title: Influence of aerosol sources on the Ice Nucleating Particles spectrum over North-Western Himalayas: Implications on Regional Climate]

PhD (Environmental Science), JNU, New Delhi (2007-2012)

[Thesis title: Quantitative Estimation of Elements and Carbonaceous Species in Ambient Aerosols and their Coupling with Local Meteorological Factors]

MSc (Environmental Science), JNU, New Delhi (2004-2006)

[FGPA 8.51 on 0-9 scale (A^+ Grade)]

[Dissertation title: Correlation between Ground Level Ultra-Violet Radiation & Lower Atmospheric Aerosol Load with other Meteorological Parameters]

Employment

[January, 2025 – present position]: Associate Professor, Department of Environmental Sciences, Central University of Jammu, India

[July, 2013 – January, 2025]: Assistant Professor, Department of Environmental Sciences, Central University of Jammu, India

[January – July, 2013]: Assistant Professor, Department of Environmental Studies, Visva-Bharati, West Bengal, India

Awards

- Fulbright Kalam Climate Postdoctoral Fellowship Award (2017-2018), USIEF.
- SERB International Travel Support (ITS) award for AAAR – 2022 in Raleigh, NC, USA (3rd – 7th October, 2022).
- SERB International Travel Support (ITS) award for EAC – 2019 in Gothenburg, Sweden (25th – 30th August, 2019).
- University Grant Commission-Junior Research Fellowship in Environmental Sciences, December 2005.

Honors/recognitions

- Core Committee Member-Earth and Atmospheric Sciences, Indian National Young Academy of Sciences (INYAS), INSA, New Delhi (2025-2027).
- Member, Indian National Young Academy of Sciences (INYAS), INSA, New Delhi (2023-2028).
- Co-Coordinator, DST "Promotion of University Research and Scientific Excellence (PURSE)" grant titled "Drone technology based real time air pollution online monitoring at dumping sites in Jammu Region - Adsorption & Sensors application using innovative biomaterials"; INR 6.5 crores.
- Member, Air Pollution Measurement Unit in the Department of Science & Technology's Technical Air Resource Unit for Scientific Analysis, Management and Coordination (2022).
- Nodal Faculty for Jammu & Kashmir in National Knowledge Network on Aerosols to support National Clean Air Programme (2019-till present).
- Institute of Repute representative and technical partner to Jammu & Kashmir Pollution Control committee to support National Clean Air Programme (2021-till present).
- Member, City level implementation Committee for National Clean Air Programme.
- Subject expert member in District level expert appraisal committee on EIA for District Samba, J&K (2017-2018).

Area of Specialization: Aerosols, Air quality, Human Health and Climate

- Role of aerosols as ice nucleating particles in Aerosol-cloud interactions.
- Bioaerosols: climate and health implications.
- Aerosol characterization for Persistent Organic Pollutants (POPs) and source tracers.
- Air pollution and air quality studies.

Current topic of research

Study of physical, chemical, biological, cloud forming and ice nucleating properties of particulate matter to develop their process level understanding in the North-Western Himalayan Region (NWHR).

Professional Trainings

- Training in "Traditional and Modern methods for Bioaerosol analysis" organized by Paerl Lab, Jordan Hall, NC State University, Raleigh, NC, USA (13th August – 24th August, 2018).
- Laboratory Chemical Waste Management Training organized by Environmental Health and safety (EHS) Centre, NC State University, Raleigh, NC, USA (27th February, 2018).
- Training in Chemical Hygiene Plan organized by Environmental Health and safety (EHS) Centre, NC State University, Raleigh, NC, USA (19th December, 2017).
- Training in Hazardous Waste Management organized by Environmental Health and safety (EHS) Centre, NC State University, Raleigh, NC, USA (18th December, 2017).
- Compressed Gas Regulator Safety Training organized by Environmental Health and safety (EHS) Centre, NC State University, Raleigh, NC, USA (18th December, 2017).
- Principles of Radiation Safety - Radioactive material safety training organized by Environmental Health and safety (EHS) Centre, NC State University, Raleigh, NC, USA (30th November, 2017).
- Training to handle/run various instruments: continuous monitors, particulate (high and low volume) samplers and cascade impactors for sampling, TD-GCMS, ICP-OES, TOR/TOT analyzer, SEM-EDS, CHNS-O analyzer, optical transmissometer, Ion Chromatograph for aerosol analysis in Advanced Instrumentation Research Facility and SES lab, JNU (2008-2009).
- "XXIII National Training Programme in Electron Microscopy for Scientific Investigators, 2007" (Basic & Advance Course) organized by AIIMS, New Delhi – 110029 (12th November 2007 – 24th November 2007).

Publications (in peer reviewed international journals):

Best recent publications:

S.No.	Publication details
1.	Bamotra et al., 2025: Air Pollution from Dumping Sites in India: Implications on Environmental Health. Water Air Soil Pollut 236, 624 (2025) [Journal Impact Factor: 3 (2024)]

2. Kumari and Yadav, 2025: Unveiling the role of bioaerosols in climate processes: a mini review; International Journal of Environmental Research 18 (5), 81 (2024) [Journal Impact Factor: 3.5 (2024)]

3. Kumar et al., 2024: Multi-time-scale surface ozone exposure and associated premature mortalities over Indian cities in different climatological sub-regions; Air Quality, Atmosphere & Health 17 (8), 1807-1823 (2024) [Journal Impact Factor: 2.9 (2024)]

4. Tripathi et al.,2024: Air pollution from biomass burning in India; Environmental Research Letters 19 (7), 073007 [Journal Impact Factor: 5.6 (2024)]

5. Varghese et al., 2024: Relationship between fungal bioaerosols and biotic stress on crops: a case study on wheat rust fungi; Journal of Plant Diseases and Protection 131 (3), 823-833 (2024) [Journal Impact Factor: 2.2 (2024)]

6. Jose et al., 2024: Complex hygroscopic behavior of ambient aerosol particles revealed by a piezoelectric technique; ACS Earth and Space Chemistry 8 (5), 983-991 (2024) [Journal Impact Factor: 2.9 (2024)]

7. Mahant et al., 2023: An open-hardware community ice nucleation cold stage for research and teaching; HardwareX 16, e00491 [Journal Impact Factor: 2.1 (2024)]

8. Bamotra et al., 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 (9), 601 (2022) [Journal Impact Factor: 3.0 (2024)]

9. Yadav et al., 2022: Bioaerosol Diversity and Ice Nucleating Particles in the North-Western Himalayan Region Journal of Geophysical Research: Atmospheres 127 (12), e2021JD036299 (2022) [Journal Impact Factor: 3.5 (2024)]

10. Kumar et al., 2022: Apportionment of long-term trends in different sections of total ozone column over tropical region; Environmental Monitoring and Assessment 194 (4), 298 (2022) [Journal Impact Factor: 3.0 (2024)]

11. Yadav et al., 2022: Current status of source apportionment of ambient aerosols in India; Atmospheric Environment 274, 118987 [Journal Impact Factor: 3.7 (2024)]

Book Chapter

- Kumar et al. (2025) "Effect of heat wave events on air-quality: Implications for environmental health" in Book: Air Pollution and Related Health Risks: Investigating Environmental Health and Sustainability, Elsevier, 9780443239649

- Sharma, K. and Yadav, S. (2023) "Air Quality Monitoring Using Geospatial Technology and Field Sensors" in SpringerNature Book "Geospatial Analytics for Environmental Pollution Modelling"; ISBN 978-3-031-45299-4 ISBN 978-3-031-45300-7 (eBook) https://doi.org/10.1007/978-3-031-45300-7

- Yadav S. and Kumar, A. (2019). Chapter 3. Air Pollution: Types, Sources and Health Implications, In: Recent Trends and Advances in Environmental Health BISAC: SCI026000. ISBN:978-1-53615-661-4

Research Projects (Completed and Ongoing)

[2024-2026]: JKPCB: "Source apportionment of aerosols in Srinagar and Upgradation of HARI Facility"
Role: Principal Investigator ***Amount: (INR: 1.5 Crores)***

[2023-2027]: Indo-Swiss Joint Research grant, SNSF- MoES: "ICE nuCleating paRticle and cloUd condensation NuClei properties in the north-western Himalayas (ICE-CRUNCH) "
Role: Principal Investigator ***Amount: (CHF 349'925 and INR 1.5 crores)***

[2023-2026]: SERB CRG: "Thermodynamic evolution of secondary inorganic aerosols in Dhauladhar region of the North-Western Himalaya"
Role: Co-Principal Investigator ***Amount: (INR: 55,29,000)***

[2021-2022]: CSTEP: " Development of emission inventories for non-attainment cities (Jammu and Srinagar) in J&K"
Role: Principal Investigator ***Amount: (INR: 4,50,000)***

[2020-2024]: JKPCB: "Source apportionment of aerosols and carrying capacity in NAC of Jammu/Srinagar" (Phase I)
Role: Principal Investigator ***Amount: (INR: 2,18,76,000)***

[2019-2021]: "Relation between Pathogenic Bio-aerosol and Biotic Stress of Crop - A Case Study for Yellow Rust Fungus of Wheat"
Role: Project Partner ***Amount: (INR: 45,00,000)***

[2015-2018]: UGC: "Investigation of Multi-Scale Temporal Variations and Trend in the Mass, Composition and Sources of Carbonaceous Aerosols in Jammu, an Urban Location in the Foothill Region of North-Western Himalayas"
Role: Principal Investigator ***Amount: (INR: 15,97,000)***

PhD Supervision & Status

- Konika Sharma [Study of carbonaceous aerosol dynamics in Jammu (J&K)]; [Expected Submission by December, 2025]
- Sajan Bandral ["Studies on the Interactions between Chemical Composition and Ice-Nucleating Properties of Aerosols over Jammu region of North-Western Himalayas"]
- Ashwani Kumar [Course work going on]

- Dr. Sarita Bamotra [Studies on Mass-Closure and Source Apportionment of $PM_{2.5}$ Aerosol in Jammu City of J&K(UT) India]; [Thesis Awarded] Current Status: CSIR RA, CUJammu
- Dr. Kiran Kumari [Characterization and Implications of Bioaerosols in Jammu region of the North Western Himalayas] [Thesis Awarded] Current Status: Assistant Professor, Gpvernment Degree College, Bilawar, J&K

Teaching activities (Courses developed and taught)

M.Sc. (Environmental Sciences)

- Atmospheric science and climate change
- Climatology
- Instrumentation and analytical techniques
- Environmental chemistry
- Environmental Impact Assessment (Shared)
- Fundamentals of Ecology
- Introduction to atmospheric sciences (Sem I, Elective)
- Advances in atmospheric environment (Sem II, Elective)

PhD Course Work

- Research methodology
- Advanced tools and techniques in Environmental Sciences
- Advanced atmospheric chemistry (Elective)

Supervision of Junior Researchers and graduate students

M.Sc. Supervision: Have supervised > 45 students for MSc Dissertation

Synergistic/Professional activities

Membership: Member, Indian Science Congress (Since 2016);

Peer Reviewer Scientific Articles: JGR: Atmospheres, Atmospheric Environment, Environment Science and Pollution Research, Journal of Atmospheric Chemistry, Frontiers in Environmental Sciences, npj Climate and Atmospheric Science.

Review Editor in Frontiers in Sustainable Cities - Climate Change and Cities.

Grant Proposal Reviewer: Fulbright Doctoral Research Awards [USIEF]

Participation in International Conference/Seminar

- Invited talk: "Ice Nucleating Particles in the North-Western Himalayas: Implications on Aerosol-Cloud-Precipitation-Climate Connection" in International Mountain Forum Conference and Upper Indus Basin Network meeting in Chengdu, China by ICIMOD and Institute of Mountain Hazards and Environment (IMHE), Chinese Academy of Sciences. [11th – 14th November, 2024].
- Oral: "Characteristics and Sources of Ice Nucleating Particles in the North-Western Himalayas". [SHWETA YADAV, Nathaniel Curtis, Rebecca Venezia, Kiran Kumari, Sunandan Mahant, Ankit Tandon, Bruce Moffett, Ryan Paerl, Markus Petters] in AAAR 40th Annual Conference to be held in Raleigh, North Carolina [3 October - October 7, 2022].
- Oral: "Ice Nucleating Particles and Bioaerosol Diversity in the Himalayan Region" in European Aerosol Conference (EAC) 2019 in Gothenburg, Sweden (August 25 - 30, 2019).
- Oral: "Ice Nucleating Particle Properties of Aerosols In The Himalayan Region" in Conference on Aerosol Impacts: Human Health to Climate Change in Centre for Atmospheric Sciences, Indian Institute of Technology, Delhi, organized by ICAS (November 26 – 28, 2018).
- Oral: Fulbright Visiting Scholar Enrichment Seminar, *"Leveraging Strategic Innovation and Entrepreneurship for Long Term Success"* in Hotel Kimpton solamar, San Diego, California (December 13- 16, 2017).
- Oral: INP measurements using immersion mode freezing, GEOPATHS Open House program, Petters lab, NC State University, Raleigh, NC, USA (November 30, 2017).
- Oral: 2nd Annual Showcase of NC State Women Faculty's Research, Creativity, and Scholarship event in the College of Textiles, NC State Centennial Campus, USA (November 1, 2017).
- Poster: "Preliminary Assessment of Aerosol Associated Organic Tracers in Rural and Urban Location of Western Himalayas" in 36th American Association for Aerosol Research (AAAR) Annual Conference held at the Raleigh Convention Center, Raleigh, North Carolina, USA (October 16-20, 2017).
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Plenary/Invited Talks National and State level Conferences/Workshops/Seminars

- [11th July, 2025] Invited sessions on " Air Pollution in India: Assessment and Audit Approaches" in National Training Programme on "Audit of Air Pollution and Environmental Issues Associated with the Transport and Energy Sectors" organized by International Centre for Environment Audit and Sustainable Development (iCED), Jaipur.
- [10 June 2025] Invited talk on "India's Ambitious Climate and Clean Air Goals: Converging & Emerging Through an ESG Lens" in session Building Awareness on Environmental, Social & Governance (ESG) in a Global Context in Global Young Academy International Conference at IIT Hyderabad.
- [21st - 22nd February, 2025] Invited talk on "Futuristic Demands and Emerging Technologies in International Conference on "Futuristic Demands and Emerging Technologies in Environment and Agri-Food Science for Sustainable Solutions (DET-EAS) organized by SRM University Delhi NCR Sonipat.
- [15th October, 2024] Invited talk on "Perspectives of Sustainability: A Way of Life" in FDP organized by MMTTP, CUJammu.
- [4th October, 2024] Invited talk on "Sampling and Characterization of Ice Nucleating Particles" during 'National workshop on atmospheric aerosol instrumentation ' organized by 'Indian Institute of Tropical Meteorology (IITM)' and 'Indian Aerosol Science & Technology Association (IASTA)'at IITM Pune, Maharashtra.
- [26th September, 2024] Co-chaired a session on "Advanced Strategies for Climate Action and Sustainable Development" in Mid-Year meeting cum Technical Symposium on Science and Technology for Sustainable Development (STSD-2024) held at IISER Kolkata, Kolkata, West Bengal.
- [29th August, 2024] Invited talk on "…" in India Clean Air Summit (ICAS) 2024 organized by the Center for Study of Science, Technology and Policy (CSTEP) at Sheraton Grand Bangalore Hotel at Brigade Gateway, Bengaluru.
- [27th August – 9th September 2024] Invited talk on "Sustainability Quotient and Particles in Air: A Human Health and Climate Perspective" in Refresher Course in Environmental Studies and Ecocentric Development (IDC) organized by CPDHE, UGC -MMTTC, University of Delhi.
- [7th August, 2024] Invited talk on "Bioaerosols and Crop loss in the era of Climate Change" in Faculty Development Programme on title "Climate change and its impact on agriculture" organized by the Department Environmental Sciences, SRM university, Delhi NCR, Sonepat, Haryana.

- [20th January, 2024] Invited speaker and Jury member in 'Young Scientist Conference (YSC)' of 9th edition of India International Science Festival (IISF) organized by DST and implemented by National Innovation Foundation-India as a Nodal Agency from 17th -20 January 2024 at DBT-THSTI & RCB, Faridabad, Haryana.
- [14th December, 2023] Invited talk on "Overview of National Clean Air Programme: India's flagship program for better air quality" under the session "National Projects" during Indian Aerosol Science and Technology Association (IASTA) National conference held in Hotel Vivanta, Navi Mumbai during 12th – 14th December, 2023.
- [2nd December, 2023] Invited talk on "Challenge of Anthropogenic Biomass Burning led Air Pollution in India" in One Day symposium Commemorating National Pollution Control Day 2023 organized by Jammu & Kashmir Pollution Control Committee, UT of J&K.
- [31st October, 2023] Invited talk on "Role of Youth in Sustainable Development" in International Youth Day Celebration organized by Red Ribbon Club, CUJ and J&K Aids control Society, Govt. of J&K.
- [30th October, 2023] Invited talk on "National Research Funding Opportunities and Grant Writing" in [FDPCAS-2023] Two-week Faculty Development Programme organized by the Department of Chemistry & Allied Sciences, Central University of Jammu.
- [13th October, 2023] Invited talk on "Igniting young minds to S.T.A.R.T. "Science, Technology, Augment, Research, and Training" Special focus on National & International Fellowship Opportunities" in Lecture series "Embarking on the Research and Industrial Odyssey: Explore, Experiment, Innovate and Celebrate Discoveries" organized by IIT Jammu.
- [16th September, 2023] Invited talk on "Ozone Recovery and Climate Action: Present Status and Way Forward" in Ozone Day Workshop organized by Jammu & Kashmir Pollution Control Committee, UT of J&K.
- [24th August, 2023] Invited talk as Moderator in session "Airshed approach – optimising synergies for urban and rural air pollution management" during the fifth edition of the India Clean Air Summit (ICAS) a national-level flagship event, organised by the Centre for Air Pollution Studies (CAPS), Center for Study of Science, Technology and Policy (CSTEP) at Radisson Atria, Bengaluru during 23rd -25th August, 2023.
- [26th July, 2023] Plenary invited talk on "Aerosol-Biosphere-Climate Interactions: Indian Perspective" in a National Workshop on "Atmospheric Aerosol Measurements and Modeling over India: Past decade, current status, and challenges ahead" organized by CACS IIT Madras and INYAS in Munnar, Kerala during 26th -28th July, 2024.
- [22nd June, 2023] Invited talk on "Unveiling Climate Uncertainty: the Crucial Role of Ice Nucleating Particles in Aerosol-Cloud-Climate Interactions" in Center for Atmospheric and Climate Sciences, IIT Madras, Chennai.
- [19th June, 2023] Invited talk on " The forgotten story of Organic Carbon in the atmosphere: Key to understand role in Climatic Processes" in the MOD Lab, Materials Group, Bhabha Atomic Research Center, Mumbai.
- [9th June, 2023] Invited to moderate a panel discussion on "Peer-Reviewed Preprints: Benefits and Limitations for Young Indian Researchers" organized by INYAS.
- [27th May, 2023] Invited for Panel Discussion on "Towards more harmony and inclusiveness in Higher Education Institutions of India" organized by SPSTI in association with the Forum of Retired Vice Chancellors and Directors (FRVCD) and Chandigarh chapters of INSA, NASI and INYAS.
- [19th May, 2023] Invited talk on "Lifestyle for Environment: A Sustainable Solution to Climate Induced Disasters" in National Seminar on "Climate Change and Disaster Risk Reduction: Making Sustainability a way of life" organized by Govt. Degree College for Women, Kathua (JKUT).
- [24th March, 2023] Invited talk on "Understanding the STEM Gap & ways to fill it: Women and Girls in Science, Technology, Engineering and Mathematics" in National Conference on "Science and Technology in Sustainable Development with Women Empowerment" organized by GDC Ramgarh in collaboration with Indian Science Congress Association, Jammu Chapter.

- [21st January, 2023] Invited as Jury member in Young Scientist Conference (YSC), India International Science Festival (IISF) 2023 held at MANIT, Bhopal on 21-24 Jan., 2023.
- [6th January, 2023] Invited talk on "Multi-sectoral Strategies for Clean Air Goals and Clean Energy Transition to achieve Sustainable Development through Women Empowerment" in Women Science Congress of 108th Indian Science Congress organized by R.T.T.M Nagpur University, Nagpur during 3rd – 7th January, 2023.
- [14th October, 2022] Invited talk in the Department of Environmental Sciences & Engineering (ESE) and Department of Chemistry, Gillings School of Global Public Health, University of North Carolina at Chapel Hill.
- [7th December, 2022] Invited talk on "Understanding of ambient aerosols will lead to better understanding of climate change over the Himalayas" in an online webinar on Disaster Risk Reduction organized by National Institute of Disaster, MHA, GoI.
- [23rd September, 2022] Invited talk on " Climatic Disasters in the Himalayas" in a 3 days online Training on Disaster Risk Reduction jointly organized by National Institute of Disaster management and Central University of Jammu (J & K).
- [7th September, 2022] Invited talk on "Clean Air Goals in India: Importance and Status of Source Apportionment Studies" in a State Level Function on "International Day of Clean Air for blue skies" organized by Punjab Pollution Control Board.
- [8th March 2022] Invited talk on "Chemical Characterization of Particulate Matter and Source Apportionment" in AICTE Virtual School on Atmospheric Pollutants and Their Impact organized by IIT Madras.
- [11th January, 2022] Invited Expert lecture in an International conference on sustainable energy education (ICSEE), 2022 On Reimagining the purpose of Energy Education beyond Conservation organized by Department of education, University of Kerala in collaboration with Energy management centre, Govt. of Kerala..
- Series of invited talks in Faculty Induction Programme-05 organized by the UGC-Human Resource Development Centre (HRDC), Guru Nanak Dev University, Amritsar on 8th January, 2022, 22nd October, 2021, 18th August, 2021, 20th February, 2021and 24th November, 2020.
- [10th December, 2020] Invited talk on "Targets & Challenges of National Clean Air Programme: Role & Responsibility of Media" in orientation programme, Department of Mass Communication and New Media, CUJ.
- [25th September, 2020] Invited talk on "Vegan Diet: a solution for better environment" in Vegan Outreach Webinar - Food Planet Health, Vegan outreach and NSS.
- [19th December, 2019] Invited talk on "Characteristics of Aerosols in the Himalayan Region" in Centre for Incubation, Innovation, Research and Consultancy, Bengaluru, Karnataka.
- [8th March, 2019] Plenary talk on "Bio-aerosols as potential Ice Nucleators in the Himalayan Region" in Golden Jubilee National Symposium (CIPME-2019)" in Guru Nanak Dev University, Amritsar.
- [15th February, 2019] Invited talk on "Resurgence in INP research: Bioaerosols, pollution or dust?", Environmental and Water Resources Engineering Division., IIT Madras, Chennai.
- [27th November, 2018] Oral presentation on "Ice Nucleating Particle Properties of Aerosols In The Himalayan Region" in Conference on Aerosol Impacts: Human Health to Climate Change in Centre for Atmospheric Sciences, Indian Institute of Technology, Delhi, organized by IASTA (26th – 28th November, 2018).
- [26th April, 2017] Participated in two days Workshop on *"Transacting Students' Engagement for Rural Community Development"* organized at Central University of Jammu in collaboration with National Council of Rural Institutes (NCRI), Ministry of Human Resources and Development, Hyderabad (26th - 27th April, 2017).
- [21st November, 2016] Plenary talk on "Multi-Scale Temporal Dynamics in Carbonaceous Aerosols over North-Western India" in two day National Conference on 'Change in Cryosphere and Impact on Ecosystem Services and Rural

Livelihood: Climate change, agriculture and sustainable development in the Himalayan region organized by the Institute of Mountain Environment, Bhaderwah Campus, University of Jammu during 21st – 22nd November, 2016.

Outreach activities

- Jury member, Young Scientist Conference, India International Science Festival, DBT THSTI - RCB Campus (17th – 20th January, 2024).
- Jury member, Young Scientist Conference, India International Science Festival, MANIT, Bhopal (21st - 24th January, 2023).
- Participated in Third Roscoe R. Braham seminar on "COnvective Precipitation Experiment (COPE)" by Professor Sonia Lasher-Trapp from University of Illinois at Urbana-Champaign (October 16, 2017).
- Participated in interactive seminar on "Mentor/mentee relationship: Communicating Expectations, Aligning Expectations and Assessing Understanding" by Susan Pusek, Director of Education and Training Programs for the UNC, Chapel Hill, NC TraCS program (September 20, 2017).
- Attended a Seminar on "Mystery Fish Killer in Delaware, USA" by Dr. Carmelo Tomas, Emeritus Professor from UNC-Wilmington (September 18th, 2017).
- As Convener, Outreach committee, I have planned/organized various educational/field trips, laboratory visits for MSc students.

Conference/Workshop/Seminar Organized

- [8th January, 2025] Expert Talk on Atmospheric Investigations using Ground Based LiDAR & Satellites organized by CUJammu & PRL, Ahmedabad **Role: Co-Convener.**
- [28th November, 2024] Science Camp "Biology Beyond Books: Hands-On Experience with Advanced Zoology Tools and Techniques in Modern Biology" organized by INYAS and Department of Zoology, CUJammu. **Role: Convener.**
- [12th -13th September, 2024] Technical symposium on World Ozone day organized by CUJammu, INYAS and Jammu & Kashmir Pollution Control Committee. **Role: Convener.**
- [11th March, 2024] The Office of International Affairs, CUJammu and INYAS organized a symposium on International Women's Day 2024: 'Invest in women: Accelerate progress' in commemoration of the International Women's day, 2024. **Role: Convener.**
- [26th February – 1st March, 2024] 2nd Aerosol Winter School MANTHAN (Minds on Air quality human health & climAte Nexus) – 2024 was organized by the Department of Environmental Sciences, CU Jammu in collaboration with Sindhu Central University, UT of Ladakh and Indian National Young Academy of Science (INYAS-INSA). **Role: Convener.**
- [27th February, 2024] Office of Dean Students' Welfare, CUJ and INYAS organised the program of Vigyan-Varta-2. Around 3000 students and 300 teachers of High and Higher Secondary Schools of rural zones of District Samba, Jammu & Kashmir visited the CUJ campus between 27th of February, 2024 and 6th of March, 2024. **Role: Convener.**
- [27th – 28th February] Central University of Jammu in collaboration with INYAS celebrated National Science Day with theme 'Indigenous Technologies for Viksit Bharat' on February 27- 28, 2024. **Role: Convener.**
- [20th December, 2023] The Office of Dean International Affairs, Central University of Jammu has initiated "International-Connect (I-Connect) Lecture Series in collaboration with INYAS". The first lecture of the series was

delivered on "International mobility: How to achieve and What to expect" by Prof. Sachin S. Gunthe, Coordinator, CACS & Professor in Civil Engineering, IIT Madras at 3:30 pm on 20th December, 223 in CUJ. **Role: Convener.**

- [20th December, 2023] INYAS and CUJ has started a series "Vigyan Varta: "Confabulation with Next Gen Science Ambassadors" to bridge the gap between seasoned scientists and young budding minds in Jammu region, J&K has been initiated. The first event under this initiative took place at Kendriya Vidyalaya, Rahya-Suchani, District-Samba in collaboration with the Department of Environmental Sciences, CUJ. **Role: Convener.**
- [19th – 20th October 2023] Training programme on "Aerosol sampling and Gravimetry Analysis" for JKPCC officials/Scientists. **Role: Convener.**
- [26th – 28th July, 2023] National Symposium on Atmospheric Aerosol Measurements and Modelling over India: Past decade, Current status, and Challenges ahead in Munnar, Kerala **Role: Co-Convener.**
- [31st May, 2023] WiSTEM-2023, a symposium on "Women in STEM as enablers of change in Amrit Kaal" was organized in CUJ campus in hybrid mode. **Role: Convener.**
- [27th May, 2023] National Workshop on "Waste Literacy and Management" was jointly organized by CUJ and INYAS. **Role: Convener.**
- [22nd – 23rd April, 2023]: PRAYOJAN 2023, INYAS Flagship Event (Post-PhD: Research, Academia and Industry Opportunities, Science Journalism, Grant Writing and Networking) **Role: Convener.**
- [20th March, 2023]: National Seminar on "Accelerating Change to solve the Water and Sanitation Crisis" to celebrate World Water Day under the banner of India's G20 Presidency in 2023. Jointly organized by INYAS and GDC Paloura. **Role: Coordinator.**
- [20th – 25th February, 2023]: 6 days Winter School-2023 on "Hands on Training on Instrumentation and Analytical Techniques for Atmospheric Aerosol Measurements and Source Apportionment Studies" jointly organized by the Department of Environmental Sciences, Central University of Jammu and Indian National Young Academy of Sciences (INYAS). **Role: Convener.**
- [21st - 23rd September, 2022]: 3 days online Training on Disaster Risk Reduction jointly organized in Central University of Jammu in collaboration with National Institute of Disaster management, New Delhi.; **Role: Coordinator.**
- [15th - 16th September, 2022]: National Conference on Sustainable Environment: Water-Health-Agriculture-Climate Nexus in Central University of Jammu. **Role: Organizing Secretary.**
- [1st June, 2022]: National Workshop on "Air Pollution and Health Impacts [Need of Interdisciplinary Research]" in Central University of Jammu **Role: Convener.**
- [25th June, 2019]: International Workshop on "Role of Aerosols in Ice Nucleation: A climate perspective" in Central University of Jammu **Role: Convener.**

Networking, Public engagement and awareness

To work for clean air goals in the Himalayas and to meet objectives of the National Clean Air Programme (NCAP) in the Union Territory of Jammu & Kashmir, we have signed three Memorandum of Understanding (MoU) till date:

I. **6th June, 2019**: Executed a tripartite MoU with Ministry of Environment Forest and Climate Change and Jammu & Kashmir Pollution Control Board.
II. **5th February, 2020**: Executed MoU with Jammu & Kashmir Pollution Control Board to establish a dedicated aerosol instrumentation facility in CUJ Campus.
III. **26th March, 2021**: Executed a tripartite MoU with Jammu & Kashmir Pollution control board and Municipal corporation to involve local bodies for seeking solutions to the problem of air pollution.

IV. **07th December 2024:** Executed a MoU with Jammu & Kashmir Pollution Control Committee for Source Apportionment Study of Ambient Aerosols of Srinagar & Up-gradation and Functioning of the Himalayan Aerosol Research Instrumentation (HARI) Facility in CUJammu.

V. **05th February 2025:** Executed a tripartite MoU with Jammu & Kashmir Pollution Control Committee and Jammu and Kashmir Forest Department to conduct measurements pertaining to Atmospheric and Climate Research in Patnitop.

VI. **08th April 2025:** Executed a MoU with India Meteorological Department to work on a project titled "Real time weather event attribution analysis for predicting weather parameters".

[Shweta Yadav]