UPDATED CURRICULUM VITAE

DR. SUDESH YADAV

Professor (Environmental Chemistry)
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Research Areas: Environmental Chemistry (Air Pollution and Aerosol Geochemistry, Fog and Dew Chemistry, E-waste, POPs and Metals in Environment, Air pollutant-plant interactions, Analytical Chemistry)

Educational Qualification:

- Ph. D. (2004) Environmental Sciences, JNU, New Delhi (Title: Aerosol Geochemistry in Rajasthan and Delhi regions and its environmental Implications. Mentor: Prof. V. Rajamani)
- M. Phil. (1999) Environmental Sciences, JNU, New Delhi (Title: Geochemistry of Particulate Matter in Delhi Air. Mentor: Prof. V. Rajamani)
- M. Sc. (1996) Inorganic Chemistry, MDU, Rohtak, Haryana
- B. Sc. (1994) MDU Rohtak, Haryana

Teaching and Research Experience:

- Professor at SES: since 2019
- Associate Professor at SES, JNU, New Delhi: 2016 to 2019
- Assistant Professor at SES, JNU, New Delhi: 2006 to 2016
- Lecture at DGC Gurugram, Govt of Haryana: 2004 to 2006

Awards and Honors:

- DST-PAC best young scientist presentation award (2003)
- Best presentation Young scientist award in International conference on Environment at Bhopal (2006)
- DST fast Track Young Scientist: 2004 to 2008

Administrative Responsibilities:

National Level

- Member of subject expert group to evaluate MOOCs Proposal in Environmental sciences for SWAYAM portal
- Expert member for instrumentation at AIIMS
- Expert member in the workshop on certification of Community Resource Person and mission on climate resilient agriculture under Sustainable Livelihood adaptation for climate change (SLACC) at NIRDPR, Hyderabad Sponsored by world bank and MoRD, GOI

- Expert member in Module framework development write-shop for SLACC at NIRDPR, Hyderabad Sponsored by world bank and MoRD, GOI
- Expert member in environmental sciences in different institutions, UGC/CSIR

University Level

- Chairperson, University Sports Committee, 2022-2023
- Coordinator, University Cultural Activities Committee, 2018-2020
- President, JNU Faculty Club, 2019-2023
- Vice president, JNU Faculty club, 2015-2019

Member of committees:

Campus Development Committee, 2016-2019,
University cultural committee, 2016-18
$2^{nd,}$ 3^{rd} and 6^{th} convocation committee,
National Science Day committee, 2017, 2018, 2019
Governor Acharya Award Committee,
Time table Committee 2019
SPICMACAY International Convention, 2019
Intellectual Property Management Committee, 2018-2020
Sports advisory Committee, 2016-17
Placement cell, 2016 onwards
Faculty In-charge of GC GCMS and WDXRF facility at AIRF, 2017 onwards
Special invitee to Hindi Committee, CDC
University academic council
University Court

Member of committees at School Level:

M. Sc Field Trip, Earth Day committee, Environmental awareness, Library Committee, Placement Cell, Time table committee, Aesthetic committee, Survey board, ENVIS, DSA-SAP 1 and II, FIST, etc.

Teaching contributions - Courses Teaching/Taught:

Air Pollution ES-477, Air pollution Chemistry ES 215,
Environmental Pollution ES-577, Environmental Pollution ES-107,
Field Work ES 234,
Lab-Work-I ES-232,
Environmental Chemistry ES-462,
Introduction to Environmental Science (ES 301), School of Language Literature and Cultural studies
Environmental Science, School of Engineering
Water Pollution ES-475,
Soil Science ES114,
Analytical Techniques ES-654,
Chemical Speciation ES-675

Research Contributions:

Sponsored Research Projects:

- Development and demonstration of algae based gas and particle pollution quenchers in ambient atmosphere and skill development among young air quality protectors as PI DRIIV, PMO (Rs 8.0 lacs)
- "Evaluating Role of the Thar desert in contributing natural mineral dust to downwind atmospheric dust in northern India and Himalayan foot hills" As Co PI, DST (2020-23, 68.3 lacs)
- "Association of Persistent Organic pollutants with incident diabetes among urban Indian adults" Network project under Indo US scheme, ICMR India (2016-2018, Rs 24.22 lacs).
- "A study on implications to human health in relation to aerosols and bioaerosols in ambient atmosphere of Delhi" JNU-UPOE II (2015-2019, 34.5 lacs).
- "Chemical Characteristics of <2.5 μm size aerosols in N NW parts of India: sources and processes". CSIR (2011 -2014, 29 Lacs).
- "Metal characterization of E waste and environmental impacts due to its recycling" UGC (2012-2015, 10.6 lacs).
- "Aerosols Geochemistry in the Thar desert and its margins" DST (2004- 2008, 10 lacs).
- Characterization of sulfate and nitrate ions in aerosols around the thermal power plants in India, NTPC (2008-2009, 1.5 lacs).

In addition grants have also been received from UGC-JNU-Capacity Build-Up Scheme, DST-PURSE Scheme and JNU and were utilized in setting up of laboratory and carrying out scientific research at JNU.

Analytical Facilities Developed:

1. Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES) for major and trace elements analysis using the destructive method.
2. Atomic Absorption Spectrometer (AAS)
3. Ion Chromatograph (IC)
4 Ultraclean geochemical laboratory for sample processing

Experience of working on X-Ray diffraction (XRD) for mineralogical analysis, Inductively Coupled Plasma - Mass Spectrometer (ICP-MS), GC, GCMS, TQ GCMS for pesticides and PCB analysis in human serum samples.

Collaborations Developed:

Within India- we have working collaboration with many faculty members of School of Environmental Sciences and of other science schools within JNU, and of other universities namely, GNDU, Amritsar, CUJ, Jammu, CUHP, Dharmashala, AMU, Aligarh, IUAC, New Delhi, MDU, Rohtak, PGIMS, Rohtak, NTPC India, PHFI, Gurgaon, AIIMS, New Delhi, BSIP, Lucknow

Outside India- with Harvard University, Boston and Emory University, Atlanta, USA, and Adelaide university, Australia.

Papers in peer reviewed journals:

1. Verma A., Yadav S. (2023) Chemical speciation, bioavailability and human health risk assessment of metals in surface dust from an industrial cluster in India. Arch Environ Contam Toxicol. doi: 10.1007/s00244-023-00984-5.
2. Gorka R., Kumar R., Yadav S., Verma A. (2022) Health implications, distribution and source apportionment of heavy metals in road deposited dust of Jammu City in north-western India. Chemosphere, 136475
3. Rathee A., Yadav S. (2022) Health risk assessment using chemical signatures of fine and coarse particles collected at breathing level height during firework display in New Delhi, India. Human and Ecological Risk Assessment: An International Journal 28 (8), 893-916
4. Nath S., Chaudhary S., Rathi A., Yadav S. (2022) Chemistry and buffering capacity of fog water collected in and around New Delhi, India Environmental Science and Pollution Research, 1-15
5. Mills J . G., Selway C. A., Weyrich L.S., Skelly C., Weinstein P. Thomas T., Jennifer M Young J. M., , Marczylo E., Yadav S., Yadav V., Lowe A. J., Breed M. B. (2022) Rare genera differentiate urban green space soil bacterial communities in three cities across the world Access Microbiol 27;4(1)
6. Chaudhary S., Kumar S., Antil R, Yadav S. (2021) Air quality before and after Covid-19 lockdown phases around New Delhi, India. Journal of Health and Pollution
7. Selway C.A., Mills J.G., Weinstein P., Skelly C., Yadav S., Lowe A., Breed M.F., Weyrich L.S. (2020) Transfer of environmental microbes to the skin and respiratory tract of humans after urban green space exposure. Environment International 145, 106084
8. Antil R, Yadav S., Chaudhary S. (2021) Assessment of impact of covid-19 lockdown on air quality in national capital region of New Delhi, India. The Holistic Approach to Environment.
9. Kumar S., Yadav, S. (2020) Chemistry of Size-segregated particles: a study of sources and processes in N NW India. Atmospheric Pollution research
10. Jaacks L. M., Yadav S., et al (2019) Metabolite of the pesticides DDT and incident type 2 diabetes in urban India. Environment International 133, 105089.
11. Verma, A., Kumar R., Yadav, S. (2019) Distribution, pollution levels, toxicity, and health risk assessment of metals in surface dust from Bhiwadi industrial area in North India. Human and Ecological Risk Aassessment.1-21
12. Yadav, A., Bhatia A., Yadav, S., Kumar V., Singh B. (2019) The effects of elevated CO_2 and elevated O_3 exposure on plant growth, yield and quality of grains of two wheat cultivars grown in north India. Heliyon, 5 e02317
13. Mina, U., Chandrashekara, T.K., Kumar, S.N., Meena, M.C., Yadav, S., Tiwari, S., Singh, D., Kumar, P., Kumar, R. (2018) Impact of particulate matter on basmati

rice varieties grown in Indo-Gangetic Plains of India: Growth, biochemical, physiological and yield attributes. Atmospheric Environment 188, 174-184
14. Kumar, R., Chaudhary S., Yadav S. (2018) Anthropogenic influences on the hydrogeochemistry and water quality of ground water in singrauli power belt region, central india. Proceedings of National Academy of Sciences. 85 (3), 637-658
15. Kumar, S., Nath, S., Bhatti, M.S., Yadav, S. (2018) Chemical Characteristics of fine and coarse particles during winter time over two urban cities in north India" Aerosol and Air Quality Research, 18, 1573-90
16. Kumar, P., Kumar S., Yadav, S. (2018) Seasonal variations in size distribution, water-soluble ions, and carbon content of size-segregated aerosols over New Delhi. Environmental Science and Pollution Research 25 (6), 6061-6078.
17. Nath, S., Yadav, S. (2018) A comparative study on fog and dew water chemistry at New Delhi, India. Aerosol and Air Quality Research. 18 (1), 26-36.
18. Hira, M., Yadav S., Morthekai P., Linda A., Kumar, S., Sharma, A. (2018) Mobile Phones - an asset or a liability: a study based on characterization and assessment of metals in waste mobile phone components using leaching tests. Journal of Hazardous Materials 15 (342), 29-40.
19. Atri, R.K., Yadav, S. (2016) Morphology of Coal Ash: Constraints on Fly Ash Dispersion and Air Pollution. Journal of Applied Geochemistry 18 (4), 490.
20. Kumar, P., Kumar, R., Yadav, S. (2016) Water-soluble ions and carbon content of size-segregated aerosols in New Delhi, India: direct and indirect influences of firework displays. Environmental Science and Pollution Research, 1-12.
21. Kumar, P., Yadav, S. (2016) Seasonal Variations in Water Soluble Inorganic Ions, OC and EC in PM10 and PM> 10 Aerosols over Delhi: Influence of Sources and Meteorological Factors. Aerosol and Air Quality Research 16 (5), 1165-1178
22. Aggarwal, R., Gathwala, G., Yadav, S., Kumar, P. (2016) Selenium Supplementation for Prevention of Late-Onset Sepsis in Very Low Birth Weight Preterm Neonates. Journal of tropical pediatrics, fmv096 0,1-9.
23. Sachdeva, K., Yadav, S. (2016). Characterization of Free-Fall Dust Aerosols at Two Different Heights in Delhi: Understanding the Influence of Carbon Fraction. J. Hazardous Toxic and Radioactive Waste, 20(4).
24. Verma, S., Yadav, S., Yadav, S.K., Kadyan, P.S., Singh, I., Singh, D. (2015) Heavy metals in wheat grains of Haryana (India) and their health implications. Journal of Chemical and Pharmaceutical Research 7 (10), 374-351.
25. Chaudhary, S., Banerjee, D.K., Kumar, N., Yadav, S. (2016) Assessment of bioavailable metals in the sediments of Yamuna flood plain using two different single extraction procedures. Sustainable Environmental Research 26 (1) 28–32.
26. 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.
27. Verma, S., Kadyan, P.S., Singh, D., Singh, I., Yadav, S. (2015) Evaluation of serum metal profile in relation to biri smoking using ICP-MS. International Journal of Environmental Analytical Chemistry 95(14) 1385-1394.
28. Pathak, A.K., Kumar, R., Kumar, P., Yadav, S. (2015) Sources apportionment and spatio-temporal changes in metal pollution in surface and sub-surface soils of a mixed type industrial area in India. Journal of Geochemical Exploration 159, 169–177.

29. Yadav, S., Kumar, P. (2014) Pollutant scavenging in dew water collected from an urban environment and related implications Air Quality, Atmosphere and Health 7(4), 559-566.
30. Kumar, P., Pattanaik, J.K., Khare, N., Chopra, S., Yadav, S., Balakrishnan, S., Kanjilal, D. (2014) Study of ^{10}Be in the Sediments from the Krossfjorden and Kongfjorden Fjord System, Svalbard. J. Radioanalaytical Nuclear Chemistry. 302:903–909.
31. Yadav, S., Yadav, S. (2014) Investigations of metal leaching from mobile phone parts using TCLP and WET methods. Journal of environmental Management, 144, 101-107.
32. Islamm, A., Zaidi, N., Ahmad, H., Yadav, S. (2014) Synthesis, characterization, and systematic studies of a novel aluminum selective chelating resin. Environmental Monitoring Assessment. DOI 10.1007/s10661-014-3823-5
33. Kumar, P., Yadav, S., Kumar, A. (2014) Sources and processes governing rainwater chemistry in New Delhi, India. Natural hazards. 74(3), 2147-2162.
34. Yadav, S., Yadav, S., Kumar, P. (2014) Metal toxicity assessment of mobile phone parts using Milli Q water. Waste Management 34 (2014) 1274–1278
35. Pathak, A.K., Yadav, S., Kumar, P., Kumar, R. (2013) Source apportionment and spatial–temporal variations in the metal content of surface dust collected from an industrial area adjoining Delhi, India. Science of the Total Environment 443, 662-672.
36. Islam, A., Ahmad, H., Zaidi, N., Yadav, S. (2013) Selective Separation of Aluminum from Biological and Environmental Samples Using Glyoxal-bis (2-hydroxyanil) Functionalized Amberlite XAD-16 Resin: Kinetics and Equilibrium Studies. Industrial and Engineering Chemistry Research 52 (14), 5213-5220.
37. Kumar, P., Yadav, S. (2013) Factors and sources influencing ionic composition of atmospheric condensate during winter season in lower troposphere over Delhi, India. Environmental monitoring and assessment 185 (3), 2795-2805.
38. Tandon A., Yadav S., Attri A.K. (2010) Coupling between meteorological factors and ambient load. Atmosphere Environment, 42, 1059-1064.
39. Singh, M.P., Singh, V.K., Patel, D.K., Tandon, P.K., Gaur, J.S., Behari, J.R., Yadav, S. (2010) Face mask application as a tool to diminish the particulate matter mediated heavy metal exposure among citizens of Lucknow, India. Science of the Total Environment 408 (23), 5723-5728.
40. Verma, S., Yadav, S., Singh, I. (2010) Trace metal concentration in different Indian tobacco products and related health implications. Food and Chemical Toxicology 48 (8), 2291-2297.
41. Tandon, A., Yadav, S., Attri, A. K. (2008) City wide sweeping a source for respirable particulate matter in the atmosphere. Atmosphere Environment, 42, 1064-1069.
42. Yadav, S., Chauhan, M. S., Sharma, A. (2007) Characterization of Bioaerosols during Dust Storm Period in N-NW India. Atmosphere environment, 41, 6063-6073.
43. Yadav, S., Rajamani, V. (2006) Air quality and trace metal chemistry of different size fractions of aerosols in N NW India: implications for source diversity. Atmosphere Environment, 40, 698-712.
44. Pruseth, K.L., Yadav, S., Mehta, P., Pandey, D., Tripathi, J.K. (2005) Problems in microwave digestion of high-Si and high-Al rocks. Current Science 89 (10), 1668

45. Yadav, S., Rajamani, V. (2004) Geochemistry of Aerosols of Northwestern Part of India Adjoining the Thar Desert. Geochimica et Cosmochimica acta 68 (9), 1975-1988.
46. Yadav, S., Rajamani, V. (2003) Aerosols of NW India-a potential Cu source! Current Science. Vol. 84, No.3, 78-80

Chapters in Books:

- Kumar S., Yadav S (2021) Air quality index and criteria pollutants in ambient atmosphere over selected sites: Impact and lessons to learn from COVID 19 in "Environmental Resilience And Transformation In Times Of Covid-19". Edits Ramanathan et al .. (Elsevier)
- AVM Subba Rao, Sudesh Yadav, M Vanaja (2019) "Climate change, variability and impacts" in Sustainable Livelihoods and adaptation to Climate Change
  (SLACC) Training Manual. (Edts: K R Reddy, V S Babu, RS Gavali) NIRDPR, Hyderabad.
- A.K. Attri, Sudesh Yadav, V.P. Yadav, (2017) "Environmental biotechnology" in Text book of Biotechnology (5^{th} Edition, Ed. Das, H.K.) Wiley

Scientific Articles in ISSN Number journals/magazine:

- Kritika, V. K. Jain and Sudesh Yadav (2012) Interactions between climate change and UV impacts on terrestrial biogeochemical cycling- A review. ENVIS newsletter Vol. (2) ISSN -0974-1364.
- Rakesh Kumar and Sudesh Yadav (2011) Biogeochemical cycling of elements through coal. ENVIS newsletter Vol. 17 (1) ISSN -0974-1364.
- Sudesh Yadav and Prof. V. K. Jain (2007) Aerosols in our Environment with reference to biogeochemistry ENVIS newsletter, JNU Vol 13 (1) ISSN -0974-1364

Student Guidance:

Ph. D. Awarded

1. Amarjeet (July 2022) **"**Aerosol Chemistry At Breathing Zone In New Delhi And Adjoining Areas"
2. Achachelal Yadav (Octber, 2020) "Impact of elevated carbon dioxide and tropospheric ozone interaction on growth and productivity of maize and wheat"
3. Meenkashi Hira (June, 2020) "Chemical characterization of e-waste to assess the related environmental implications" in Central University of Himachal Pradesh, Dharamshala (As Co-Guide)
4. Supriya Nath (July 2018) "Fog and Dew Water Chemistry in the Environment of Delhi region"
5. Sushil Kumar since (2018) "Environmental Chemistry of size segregated aerosol in N-NW India"
6. Rakesh Kumar September, 2017 "Environmental implications of thermal power plant emissions on the chemistry of aerosols, soil and groundwater in Singrauli power belt"
7. Pawan Kumar (2016) "Environmental Chemistry of fine aerosols and wet precipitation over Delhi ridge area"

8. Pankaj Baghel (2015) “Studies of Cosmogenic Radionuclides using accelerator mass spectrometry”
9. Satyamanyu Yadav (May 2013) “Metal characterization of E-waste and environmental impact of effluents from recycling industry in Delhi region”
10. Aditya Kumar Pathak (July, 2011) Heavy metal pollution of soil in Faridabad industrial area in Haryana”

Ph. D. Ongoing

1. Sudhanshu Shekhar (2021) Environmental Chemistry of Size segregated aerosols over Northern India
2. Hina (July 2018) Approved Title: Impact of inform e-waste recycling on soil, air water in the NCR region.
3. Anju (July 2016) Approved Title: Spatio-temporal distribution of metals in surface dust and surface soils and their chemical special in Bhiwadi industrial are in the NCR region.
4. Abdul Wahid Monib (July 2018; FN)Tentative title: chemical characterisation of surface dust and soil of kandahar region, Afghanistan and its environmental implications
5. Mohd. Arif (Dec. 2021) Working on synospis

M. Phil Awarded

1. Sudhanshu Shekhar (2021) Elemental Characterization of fine and coarse particle over New Delhi and Jhunjhunu and its environmental Implications
2. Anju (July, 2016) “Metal Toxicity Assessment in surface dust of Bhiwadi Industrial area in Rajasthan”.
3. Supriya Nath (July, 2013) “Chemical Characterization of Fog in Delhi”.
4. Krishan Kumar, (July, 2011) “Chemistry of roadside dust in Delhi”.
5. Rakesh Kumar (July, 2009) “Elemental chemistry of coal fly ash from thermal power plants in India”.

M. Sc. Projects

1. Sneha Madhavan (2023) Impact of plastic on plant growth and productivity (tentative title: ongoing)
2. Smaridhi (2023) Phosphorus distribution in aerosols (tentative title: ongoing)
3. Aishwarya Mahajan (2021, YMCA, Faridabad) metal toxicity assessment in surface dust samples from Faridabad Industrial Area (India).
4. Barsha (2017-18) Chemical characterization of dew water over IG plains
5. Saumya Awasthi (2018-2020) Dew water chemistry in the environment of Delhi ridge region
6. Manisha (2016-2017) Chemical characterization of Fan dust in indoor environment
7. Monika (2016) Department of Environmental Sciences, MDU,
8. Vandana (2016) Department of Environmental Sciences, MDU Rohtak
9. Dipita Ghosh (2016) Ecology and Environment Division, FRI, Dehradun
10. Manjesh Kumar (June, 2010) E-waste characterization and implication on our environment
11. Ruchika Sharma (June, 2010) Chemical composition on Bulk fog water over Delhi
12. Vinit Kumar (May, 2009) Review of various organic species in the atmosphere with emphasis on biogenic volatile organic compounds

13. Krishan Kumar (May, 2009) Study of road side dust and its environmental implication

Recent Invited Lectures:

1. Sampling and digestion techniques for elemental analysis of atmospheric particles on 22nd Feb, 2023 in "Hands on Training on Instrumentation and Analytical Techniques for Atmospheric Aerosol Measurements and Source Apportionment Studies" from 20th - 25th February, 2023 held at Central University of Jammu.
2. Instrumentation for elemental analysis of atmospheric particles on 22nd Feb, 2023 in "Hands on Training on Instrumentation and Analytical Techniques for Atmospheric Aerosol Measurements and Source Apportionment Studies" from 20th - 25th February, 2023 held at Central University of Jammu.
3. Atmosphere and Air Pollution on 13th Feb., 2023 in Recent Advances in Environmental Monitoring and Analysis" from February 13-17, 2023 at University of Jammu, Jammu.
4. Sampling and Analytical Techniques for Atmospheric particles, Surface Dust and Soil on 14th Feb., 2023 in Recent Advances in Environmental Monitoring and Analysis" from February 13-17, 2023 at University of Jammu, Jammu.
5. Sustainable Action @ Only One Earth in 6th Refresher Course in Environmental studies (IDC), organized by HRDC JNU. 29th August, 2022
6. Sustainable Action: Plausible Solution to Environmental Degradation Invited lecture on World Environment Day at Teerthankar Mahavir University, Moradabad
7. Sustainable Action #Only One earth (Online mode) on 5th June, 2022 at 360 Research Foundation
8. Chemistry and Buffering Capacity of Fog Water Collected in and Around New Delhi, India on 30th march 2022 International Conference on Emerging Trends in Science and Technology (Hybrid mode), held from the 29 March to 31 March at Vedanta PG Girls College, Reengus, Rajasthan, India.
9. "E-Waste and Environmental issues" on 09.12.2021 Refresher Course in Environmental Studies is organized by the Human Resource Development Centre from 08.12.2021 to 21.12.2021. Human Resource Development Centre, Madurai Kamaraj University
10. Ozone and life on earth on World Ozone Day, 16th Sept., 2021 organized by Eco-Club, Kalindi College , New Delhi
11. Sustainable development and environment pollution: an overview in 5th refresher Course in Environmental Studies (IDC) at HRDC, JNU, New Delhi (20 September– 4th October) on 24th September, 2021
12. Sustainable development and environment pollution: an overview on 25th August, 2021 in Faculty Training Program on "Multidisciplinary Innovations for Sustainable Development" at DCRUST, Murthal (23rd – 28th August) on 25th August, 2021

13. Air pollution, Issues, implications and Solutions (Virtual Mode) on 12th July, 2021at ICAR-Directorate of Poultry Research, Hyderabad
14. Understanding Air pollution in North India: Experiences and lessons (Virtual Mode) on 15th June in Short Term Training Programme (STTP) sponsored by AICTE, New Delhi on "Environment Protection and Management" during June 14th -19th, 2021 at Sardar Beant Singh State University, Gurdaspur
15. How to reduce Carbon Footprint: Need, Causes, Challenges and our role and Responsibilities (virtual Mode). National Level Workshop on World Environment Day on 5th June, 2021 at DAV Institute of Engineering and Technology, Jalandhar
16. The untold story of impacts of three odd events on Delhi's air pollution (Virtual Mode) 20th November, 2020 in 2nd Refresher Course in Geography at HRDC, JNU
17. Experiences of ODD events on Delhi's air pollution (Virtual Mode) 20th November, 2020 Refresher Course on Environment Conservation (17-30 November, 2020) at UGC-HRDC, GNDU, Amritsar
18. Experiences Of Odd Events On Air Quality (Virtual Mode) 11th September, 2020 in 4th Refresher Course in Environmental Studies, at HRDC, JNU, New Delhi
19. Current Environmental Issues: Derivers and Mitigation Options. on 2nd September, 2020 in Industry Academia interactions on " Latest Trends in Civil engineering (IAI-2020) organized by G. B. Pant Institute of Engineering and Technology, Pauri-Garhwal form 31st August-12th Sept., 2020
20. Comparative study on chemistry of dew water collected from New Delhi and adjoining townships in north India in 8th International Conference on Fog, Fog Collection and Dew held from 14-19 July, 2019 at Taiwan
21. Ionic characteristics and buffering capacity of fog water collected over New Delhi and adjoining satellite township in north India in 8th International Conference on Fog, Fog Collection and Dew held from 14-19 July, 2019in Taiwan
22. E-waste - an example of technology driven environmental pollution in 3rd Refresher course in environmental studies (inter disciplinary) on 25.7.2019, HRDC, JNU New Delhi
23. E-waste - an emerging environmental pollutant: problems, issues and challenges in 3rd Refresher course in environmental studies on 23.7.2019 at HRDC, JNU, New Delhi
24. Weather Based Agro Advisories (WBAA) to Manage Crop Production Adaptation to Climate Change in SLACC Workshop on 14.6.2019 at National Institute of Rural development Hyderabad
25. Role of Pollutants Transformations In Delhi's Air Pollution Problem in Understanding the Atmospheric Phenomena resulting in Elevated Levels of Air Pollution in Northern Region (Indo-Gangetic Plain), Particularly in Delhi-NCR on 21st Feb., 2019at CSIR-NEERI Delhi Zonal Centre on
26. Environmental wellness and environmental pollution: role of individuals in Short term course on 'Environmental Wellness' (08th to 12th April, 2019) at DCRUST, Murthal Haryana

27. Air quality in Delhi: Problems and Solutions in 113th Orientation course on 22.3.2019 at HRDC, JNU, New Delhi
28. Firecrackers emissions and Impacts in International conference on Challenges of Climate Change and air pollution Impact on Health and Economy (14-15 Dec 2018) at Maulana Azad Medical College, New Delhi
29. Myth vs Truth about Delhi's Air Pollution in 2nd Refresher on Teacher education on 4.12.2018 at HRDC, JNU, New Delhi
30. Air Pollution : Natural OR Cultural in 106th Orientation course on 17.8.2017 HRDC, JNU
31. Fundamentals of GCMS in Workshop on GCMS: Principles and applications on 28.4.2017 at AIRF, JNU, New Delhi
32. The Current Crisis of Air Pollution in Delhi in 10th Orientation course on 03.03.2017 at HRDC, JNU New Delhi
33. Advancement in Emission inventory Techniques for chemically reactive air pollutants
34. in international workshop on Urban air pollution---air pollutants, Newton Fund-Researcher links British Council, RSC, University of Birkimgham on 28.11.2.016 at IIT New Delhi
35. How to address Delhi's Air Pollution Issue in 1st Interdisciplinary Course in Environmental Studies on 8th Sep. 2016 at HRDC, JNU New Delhi
36. Air Pollution: Natural or Cultural at HRDC, JNU. 17th August, 2017
37. "Fundamental of GC" at AIRF JNU. 28th April, 2017
38. The Current Crisis of Air Pollution in Delhi" at HRDC, JNU. 3rd March, 2017
39. "Public Perception and Reality of Air Pollution in Delhi" on Science Day-2016, JNU
40. "How to address Delhi's Air Pollution Issue" 1st Interdisciplinary Course in Environmental Studies at Human Resource Development Centre, JNU 8 September, 2016
41. "Air, Pollution: Perception, reality and challenges" Biodiversity Conservation and Pollution Control-Challenges and strategies, University of Jammu, Jammu 9-10 March, 2016
42. "Air Pollution: Hype vs Truth: Role of Analytical Chemistry" International Conference on Recent Advances in Chemical Sciences, Aligarh Muslim University, Aligarh. 30th March, 2016
43. "Application potential of XRF vis a vis spectroscopic analytical techniques" AIRF, JNU. 11th Feb., 2015
44. Cellular Phones: Boon or Bane? In national conference on Environmental issues, concerns and solutions (EICS-2014) held at University of Jammu, Jammu during 24-25th March, 2014
45. E-waste - an emerging environmental problem: contaminant to pollutant in refresher course at ASC, JNU, during Feb., 2014
46. E-waste - an emerging environmental pollutant: problems, issues and challenges" in national conference on Advances in Chemical Sciences at MDU, Rohtak, March, 2013