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Educational qualification:	Ph D (Chemistry) 1994: Dayalbagh Educational Institute, Agra (India). Ph D Topic: "A study on aerosol composition and deposition flux of selected pollutants at Agra".
Post Doc:	1994-98 (Atmospheric Chemistry) National Physical Laboratory, New Delhi (India) Department of Meteorology, Stockholm University (Sweden)
Previous jobs:	Scientist (various positions): 1998-2008 CSIR-Indian Institute of Chemical Technology, Hyderabad
Research interests:	Environmental Chemistry and Climate Change (Air Pollution, Aerosol Chemistry and Climate Change, Environmental Analytical Chemistry, Atmospheric Dust, Transport and Chemical Transformations, Chemistry of Rain and Snow, Reactive Nitrogen, Air Pollution Biomonitoring, Bioaerosols, Metal Aerosols, Carbonaceous aerosols, Atmospheric Mercury)
Awards:	<ul style="list-style-type: none"> • International START Young Scientist Award 2000 by IGBP-START (<i>System for Analysis, Research and Training for global change</i>) Washington DC, USA. • CSIR Young Scientist Award 2004 in Earth and Atmospheric Sciences by Council of Scientific and Industrial Research, New Delhi. • M S Krishnan Gold Medal 2004 for Atmospheric Chemistry Studies by Indian Geophysical Union (IGU). • Thomas Kuhn Honour Pin Award 2002 by The International Union of Air Pollution Prevention & Environmental Protection Associations (IUAPPA) and the International Academy of Sciences. • IICT Gaurav Samman, 2005 Award by Indian Institute of Chemical Technology, Hyderabad.
Scholarships:	National Scholarship- 1983-86 (<i>Awarded for overall distinction</i>) National Integrated Scholarship- 1981-83 (<i>Trough Talent Search Examination</i>)
Professional Honours	<ul style="list-style-type: none"> • Deputy Director, South Asian Nitrogen Center • Fellow, Indian Geophysical Union. • Associate Fellow of Andhra Pradesh Academy of Sciences. • Editor-in-chief, Current World Environment journal • Member EIA Accreditation Committee, NABET (Quality Council of India). • Expert Reviewer of IPCC AR5 (WG1). • Review Editor of WMO/UNEP Integrated Assessment Report on

	<p>Black Carbon and Ozone 2011.</p> <ul style="list-style-type: none"> • Member, Academic Committee, Naval Academy, Ezimala. • Member, Academic Committee, College of Military Engg., Pune • Member, Board of Studies, Department of Political and Social Sciences, DEI, Dayalbagh, Agra. • Member, Academic Advisory Committee, Centre for Inner Asian Studies, School of International Studies (SIS), JNU. • Acted as South Asia Coordinator for aerosol and precipitation chemistry measurements for IMI Stockholm University under Atmospheric Brown Cloud project (2006-09). • Acted as Expert member and Indian Mentor, Air Pollution India Training Programme organized by Swedish Meteorology and Hydrology Institute, Norrkoping, Sweden (2009-10). • Member, MHRD-GIAN, Sectional Committee for Earth & Environment Sciences. • Member, MHRD-GIAN, Sectional Committee for Inter-disciplinary Sciences. • Expert member, MHRD Committee of Overseas Fellowship.Ex • Member, Academic Advisory Board, TERI. • Member, Scientific Advisory Committee, National Workshop on Ozone Day 2018, Sihiv Nadar University. • Ex-Member of Expert committee of EPTRI on Andhra Pradesh Govt GO-111 regarding safeguards of drinking water in Usman Sagar and Himayat Sagar in Hyderabad (2007). • Ex-Member, Academic Committee, Millitary College EME, Secunderabad (2010-14). • Ex-Member JNU Standing Committee on Defense Institutions (2012-14). • Expert member, Ministry of Environment, Forests and Climate Change. • Jury member DST INSPIRE programme. • Jury member, Uttarakhand S&T Council Congress (2012). • Member of Scientific Advisory Board of Environmental Science Published for Everyman Round the Earth (ESPERE). • Editorial Board member: J Indian Geophysical Union. • Editorial Board member: Journal of Energy, Environment and Carbon Credits. • Guest Editor Special Issue on trajectories of Advances in Meteorology. • Ex-Editorial Board member: Indian Journal of Chemistry A (CSIR). • Ex-Member, UGC Project Review Committee. • Constant Reviewer for reputed journals. • Examiner for Ph D Theses for different universities. • Delivered Key Note Address on Global warming and Climate Change on World Environment Day (June 5, 2007) at Agartala, Tripura, India.
<p>JNU Assignments</p>	<p>Present: Director, Trans-disciplinary Research Cluster Chairperson, Campus Development Committee Chairperson, Environmental Task Force Chairperson, Tree Plantation Committee Chairperson, Animal Birth Control (ABC) Committee Chairperson, Plagiarism Guidelines Formulation Committee</p>

	<p>Convener, Jan-Jan JNU Open Day 2016 Convener, Jan-Jan JNU Open Day 2017 Member, Internal Complaint Committee (ICC) for Guidelines Member, DST PURSE Implementation Group Member, NAAC Committee Member, JNU-IIT Committee Member, Survey Boards of different schools Member, JNU Academic Council Member, JNU Court</p>
School of Environmental Sciences Assignments	<p>Present: Chairperson, Academic Affairs Committee Chairperson, Entrance Exam Committee</p> <p>Past: Chairperson, Timetable and Evaluation Committee Convener, Central Instrumentation Facility (CIF) Chairperson, Entrance Exam Committee Chairperson, Field Trip Committee Member, Academic Affairs Committee Member, Maintenance Committee Member, Space Committee</p>
Courses Teaching:	<p>MPhil/PhD level: -Air Pollution (ES 632)</p> <p>MSc level: - Environmental Chemistry (ES 103) - Metrology (ES 203)</p> <p>BA level: -Introduction to Environmental Science (ES 301)</p>
Projects/Programmes Associating/Associated with	<ul style="list-style-type: none"> • UGC UPEII Project on Atmospheric mercury (<i>Ongoing</i>). • UGC major research project on Air pollution and plant stress (<i>Just completed</i>). • AIT-UNEP project on rural aerosols and climate change. • Atmospheric Brown Cloud (ABC) project with IMI Stockholm University, Sweden. • Indian Space Research Organization-Geosphere Biosphere Programme (ISRO-GBP) project on sources of urban atmospheric aerosols at Hyderabad. • Indo-Swedish Project on Aerosol and Precipitation Chemistry under RAPIDC programme of SIDA. • CAD (Composition of Asian Deposition) programme of DEBITS (IGBP) • ISRO-GBP Integrated Campaign on Aerosol Radiation Budget (ICARB) Campaign. • ISRO-GBP Land campaign II on Atmospheric Chemistry. • International comparison of QA/QC in chemical analysis under EANET (East Asia Precipitation Network), Japan. • Indian Reference Material (IRM) project. • ONGC (Oil and Natural Gas Commission), Goa project on `Trace metal determination in sea water samples by ICP-MS. • Indian Ocean Experiment (INDOEX), a multinational and

	<p>multidisciplinary programme.</p> <ul style="list-style-type: none"> • CAAP (Composition of Atmospheric Aerosols and Precipitation in India and Nepal) programme under IGAC (IGBP) and CSC (UK) Coordinated by NPL, New Delhi and IMI, Stoc 	
Membership of Scientific Societies	<ul style="list-style-type: none"> • Life Member, Indian Meteorological Society • Life member of Andhra Pradesh Academy of Sciences. • Life Member of Indian Geophysical Union (IGU). • Life Member o Vijnan Bharati (Vibha). • Life member of Indian Aerosol Science and Technology Association (IASTA). • Life member of Indian Society for Analytical Scientists (ISAS, Hyderabad Chapter). • Life member of Metrological Society of India (MSI) • Life member of Society for Conservation of Nature 	
Countries visited:	Canada, China, Finland, Japan, Malaysia, Maldives, Mauritius, Nepal, Sweden, Thailand, The Netherlands, UK, USA, Vietnam.	
PhD students (awarded/submitted):	<table border="1"> <tr> <td> <ol style="list-style-type: none"> 1. Dr Sudha Singh 2. Dr Gyan Prakash Gupta 3. Dr Saumya Singh 4. Dr Prasenjit Acharya 5. Dr Bablu Kumar 6. Dr Disha Sharma 7. Ms Anita Kumari (Submitted) 8. Mr Saurab Sonwani (Submitted) 9. Ms Shabana Manzoor (Submitted) </td> </tr> </table>	<ol style="list-style-type: none"> 1. Dr Sudha Singh 2. Dr Gyan Prakash Gupta 3. Dr Saumya Singh 4. Dr Prasenjit Acharya 5. Dr Bablu Kumar 6. Dr Disha Sharma 7. Ms Anita Kumari (Submitted) 8. Mr Saurab Sonwani (Submitted) 9. Ms Shabana Manzoor (Submitted)
<ol style="list-style-type: none"> 1. Dr Sudha Singh 2. Dr Gyan Prakash Gupta 3. Dr Saumya Singh 4. Dr Prasenjit Acharya 5. Dr Bablu Kumar 6. Dr Disha Sharma 7. Ms Anita Kumari (Submitted) 8. Mr Saurab Sonwani (Submitted) 9. Ms Shabana Manzoor (Submitted) 		
Number of Publications:	<p>Total Journal papers: 93</p> <p>Reviews : 08</p> <p>Books: 05</p> <p>Book Chapters: 11</p> <p>Technical reports: 02</p> <p>General Science articles: 11</p> <p>Hindi Science articles: 06</p>	

Citations:

Table below provides the impact of research through No. of citations and h-index which are considered as research impact assessment parameters.

Citation indices	
Citations	2718
h-index	26
i10-index	47

List of important publications in journals:

Trace Ambient Levels of Particulate Mercury and Its Sources at a Rural Site Near Delhi. 2018.

Anita Kumari and Umesh C Kulshrestha*.

Journal of Atmospheric Chemistry, DOI: 10.1007/s10874-018-9377-0.

Aerosol-trace gases interactions and their role in air quality control of Delhi city (India). 2018.

Anshu Sharma, S Singh and **U C Kulshrestha***.

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Chemistry of atmospheric dust and critical load assessment in Delhi region (India). 2018.

Disha Sharma and **Umesh Kulshrestha***.

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Respirable Mercury Particulates and Other Chemical Constituents in Festival Aerosols in Delhi. 2018.

Anu Arora, Anita Kumari and **Umesh Kulshrestha***.

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Feasible Mitigation Options for Air Pollution and Traffic Congestion in Metro Cities. 2018.

Kopal Verma K and **Umesh Kulshrestha***. J Indian Geophysical Union, 22(2), 212-218.

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Saumya Singh, Bablu Kumar, Anshu Sharma and **U C Kulshrestha***.

Atmospheric Pollution Research, http://dx.doi.org/10.1016/j.apr.2016.12.021.

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Anshu Sharma, Saumya Singh, **U.C Kulshrestha***.

J Indian Geophysical Union, 21, 140-147.

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Chemical Characteristics and Deposition Fluxes of Dust-Carbon Mixed Coarse Aerosols at Three Sites of Delhi, NCR. 2016.

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Journal of Energy Environment and Carbon Credits, 6, 1-8.

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Estimation of Carbonaceous Emission Impact on Urban Soil-Dust in Delhi. 2016.

Manisha Mishra and **Umesh Kulshrestha**.

Journal of Climate Change, 2,. 119–127. DOI 10.3233/JCC-160023.

Atmospheric Deposition of Reactive Nitrogen and Other Species in Relation with Long Range Transport and Land Use and Land Cover Change in North Western Himalayas. 2016.

Bablu Kumar, G P Gupta, Sudha Singh, F A Lone, **U C Kulshrestha**.

IORE J Environmental Science, 2, 1-17.

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I A Pérez, F Artuso, M Mahmud, **U Kulshrestha**, M Luisa Sánchez, and M Ángeles García.
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Spatial and Temporal Patterns of Air Pollutants in Rural and Urban Areas of India. 2014.
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Signatures of Increasing Energy Demand of Past Two Decades as Captured in Rain Water Composition and Airmass Trajectory Analysis at Delhi (India). 2014.
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U Kulshrestha*.
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U C Kulshrestha*, B Kumar, G P Gupta, Sudha Singh and M J Kulshrestha.
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U C Kulshrestha*, Raman R. S., Kulshrestha Monika J., Rao T.N. and Hazarika P.J.
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U C Kulshrestha*, L A K Reddy, J Satyanarayana and Monika J Kulshrestha.
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L A K Reddy, **U C Kulshrestha***, J Satyanarayana, Monika J Kulshrestha and K Krishna Moorthy.
J Earth System Sciences, 117, S1, 345-352.

Monsoon rain chemistry and source apportionment using receptor modeling in and around National Capital Region (NCR) of Delhi, India. 2007.

S Tiwari, **U C Kulshrestha** and B Padmanabhamurthy.
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U. C. Kulshrestha*, L. Granat, M. Engardt and H. Rodhe.
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U C Kulshrestha*, T Nageswara Rao, S Azhaguvel and Monika J Kulshrestha.

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U C Kulshrestha*, Monika J Kulshrestha, R Sekar, G S R Sastry and M Vairamani.
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U C Kulshrestha, A Saxena, N Kumar, K M Kumari and S S Srivastava.
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U C Kulshrestha, A K Sarkar, S S Srivastava and D C Parashar.
Atmospheric Environment, 30, 4149-4154.

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3. Relating Chemical characteristics of precipitation to sources in Agra. 1992.
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Atmospheric dust in India- A natural geo-engineering tool to combat climate change.

U C Kulshrestha.

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Popular Science Articles Published in Hindi Magazines

1. Vayupradushan

U. C. Kulshrestha

Spandan, Vol 2 published by IICT, Hyderabad (1999).

2. Global Warming Ki Samasya

U. C. Kulshrestha

Spandan, Vol 3 published by IICT, Hyderabad (2000).

3. Haritgriha Gasein aur Jalvayu Parivartan

U. C. Kulshrestha

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4. Haritgriha Gasein aur Jalvayu Parivartan

U. C. Kulshrestha

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5. Is Jahar ko aur na badayein:

Umesh Kulshrestha

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Invited talks/lectures delivered

- Delivered an invited talk on 'Integrated Atmospheric Chemistry Approach for Controlling Air Pollution in Delhi' on Ozone Day celebrated at Shiv Nadar University, New Delhi on September 16, 2018.
- Delivered an invited talk on 'Creation of artificial huge lakes to control air pollution in NCR at GKIT, Gaziabad on July 28, 2018.
- Delivered an invited talk on 'Thick with Dust: Air Pollution in the National Capital Region' at the Center for Policy Research, New Delhi July 16, 2018.
- Delivered an invited talk on 'Identifying Clean Technology Options through Air Pollution Chemistry Research' at JSS Academy of Technical Education, Noida during AKTU sponsored Faculty Development Program on Green Chemistry And Clean Technology sponsored by AKTU, Lucknow on June 14, 2018.
- Delivered general science lecture on 'Tips for writing and publishing quality research paper at the School of Environmental Sciences JNU under SES lecture Series on April 10, 2018.
- Delivered the Science Day Lecture on 'Atmospheric chemistry and climate change issues in south Asia' at Surya Sen College, Siliguri, on February 28, 2018.
- Delivered invited talk on 'Air pollution metrology: Issues and challenges in Indian Perspective at National Physical Laboratory on January 4, 2018.
- Delivered invited talk on Atmospheric Chemistry and Climate Change Issues in South Asia at IIT Madras on November 22, 2018.
- Delivered invited talk on 'Understanding Climate Change, Air Pollution Scenario and EIA' at the Delhi Judicial Academy, October, 7, 2017.
- Delivered invited talk on 'Air Pollution Issues in north India' at Lucknow during Indo-US workshop on air pollution on May 25, 2016.
- Delivered invited talk on 'Air Pollution Issues in Delhi' at PHD Chamber of Commerce on May 6, 2016.
- Delivered an invited talk on 'Increasing Atmospheric Nr Levels due to Air Pollution and Agricultural Activities' during a National Symposium on Managing Agriculture in a Changing Environment IARI, New Delhi during December 1-2, 2016.

- Delivered **Key Note address** on `Air Pollution and Climate Change Issues in South Asia during symposium held at Sahu College, Naziabad, (Uttar Pradesh) on March 27, 2016.
- Delivered invited talk as a **Lead Speaker on Atmospheric deposition of Nr in South Asia** during RNA meeting held at IARI during February 26-27, 2016.
- Delivered an invited talk on `Transboundary and long range transport of air pollution: an important air quality issue in south Asia' during GOGC meeting held at Hanoi, June 24-26, 2014.
- Delivered an invited talk on **Soil-derived aerosols affecting ambient levels of SO₂ and NH₃ in Indian region** during National Conference held at Pt. Ravishankar Shukla University, Raipur, January 24, 2014.
- Delivered an invited talk on `Biomass burning and atmospheric dust: Issues of regional significance for understanding climate change in south Asia' during International Conference on Climate Change & Sustainable Management of Natural Resources held at ITM University, Gwalior, February 13, 2014.
- Delivered an invited talk on `Soil-derived aerosols affecting ambient levels of SO₂ and NH₃ in Indian region' during Refresher course organized by Academic Staff College, Feb-March, 2014.
- Delivered an invited talk on `Importance of Ambient Air Monitoring During Environmental Disasters-Pre, During and Post Disasters Indicators' during First Refresher Course in Disaster Management organized by Academic Staff College, November 2013.
- Delivered an invited talk on `Air pollution and Need of Green Technologies' during 2nd National Conference on Recent Advances in Chemical and Environmental Science: Green Chemistry a solution held at ITM University, Gwalior, November 16, 2013.
- Delivered an invited talk on `Atmospheric aerosols: Need to focus upon atmospheric dust and carbonaceous aerosols in Indian region' during National Symposium on Emerging trends in Physics for Ionizing Radiations, Aerosols and Material science, Patiala University, December 14, 2013.
- Delivered an invited talk on `Global warming: Greenhouse gases, their emissions and mitigation in India' UGC Academic Staff College, JNU, New Delhi, March 21, 2013.
- Delivered an invited talk on `Atmospheric soil dust- a significant scavenger of atmospheric SO₂ in Indian region' UGC Academic Staff College, JNU, New Delhi, March 14, 2013.
- Delivered an invited talk on `carbon measurements and related programmes in India' during Inception Workshop on Regional Programme on Atmospheric Science and Policy: 'Reducing the Impacts of Black Carbon and other Short Lived Climate Forcers held at Kathmandu, Nepal, April 2-3, 2012.
- Delivered an invited talk on `Coping with Global Climate Change: Time to pursue in-depth research on the issues of regional significance' during 'International Conference on "Recent Developments in Environmental Impact Assessment & Integrated Approach for Carbon Management' to be organized by NEERI, Nagpur during 28-30, March 2012.
- Delivered an invited talk on `Atmospheric dust- a significant scavenger of sulphur dioxide in India' during the International workshop on `Atmospheric Chemistry in South Asia: Progress and emerging issues' held at IISER Mohali during March 5-6, 2012.
- Delivered the inaugural lecture `Atmospheric soil dust- a significant scavenger of atmospheric SO₂ in Indian region' during Chemistry refresher course at Delhi University as part of International Year of Chemistry 2011' on December 01, 2011.
- Delivered an invited talk on `Making unique observations: a healthy story of unhealthy dust' during Science camp of DST-INSPIRE programme organized by IIT Delhi during December 26 – 30, 2011.
- Delivered an invited talk on `Atmospheric soil dust: Relevance to acid rain and climate

- change in the Indian region'** during the International workshop on tropospheric chemistry hosted by TERI University in Vasant Kunj, New Delhi during November 28-30, 2011.
- Delivered an invited talk on **'Atmospheric soil dust- A natural geo-engineering tool to combat acidification and climate change in India'** held at during UGC-SAP workshop held at DEI, Dayalbagh, Agra on September 10, 2011.
 - Delivered an invited talk on **Air Pollution in Indian Region** as an expert during Air Pollution Management India programme organized by Swedish Meteorology and Hydrology Institute, Sweden at Pune during Feb 01-06, 2010.
 - Delivered an invited talk on **Climate Change and Business Opportunities** during International Seminar on Climate and business held at Technia Institute New Delhi of during January 29-30, 2010.
 - Delivered an invited talk on **Scientific Importance of Yagna and Agnihotra in the Atmosphere** during Vishwa 2009 conference during December 18-20, 2009 at Mumbai.
 - Delivered an invited talk on **Atmospheric soil dust in India- A natural geo-engineering tool to combat climate change** during International Conference RAP 2009 at Agra organized by St John's College Agra, December 17-19, 2009.
 - Delivered an invited talk on **Atmospheric deposition of reactive nitrogen in India** during International workshop on N deposition and Critical Loads, November 16-18, 2009, Edinburgh, UK
 - Delivered an invited talk on **Air Pollution in India: Recent Challenges and Targets Ahead** during World Environment Day Seminar at Doon University, Dehradun, June 5-6, 2009.
 - Delivered an invited talk on **Environmental Disasters and Importance of Ambient Air Monitoring- Pre, During and Post Disasters'** at Academic Staff College, JNU, New Delhi, April 22, 2009.
 - Delivered an invited talk on **Atmospheric soil dust deposition in India- A natural geo-engineering tool** at Academic Staff College, JNU, New Delhi, April 20, 2009.
 - Delivered an invited talk on **Role of greenhouse gases and their management in south Asia during Seminar on 'Role of greenhouse gases and their management'** organized by Ramakrishna Mission Vidyamandir, Belur Math, Calcutta, March 25, 2009.
 - Delivered an invited talk on **Atmospheric soil dust in India- A natural geo-engineering tool to combat climate change** during JNU Science Festival on Technology Day, February 27, 2009.
 - Invited talk on **Understanding scavenging of crustal and anthropogenic aerosols in India** during TIGERZ Data Workshop, IIT Delhi, 7-8 January, 2009.
 - Invited talk on **Climate change research and policy: Industrial development perspective** during Seminar on Climate Change and Industry Perspective held at SES JNU, November 4, 2008.
 - Invited talk on **Climate Change: Waste, Carbon Emissions and Indian Scenario** during Conference on 'Climate change business sustainability and society', organized by ASSOCHAM at India Habitat Center, New Delhi, November 11-12, 2008
 - Delivered invited talk on **Importance of ambient air monitoring** during FICCI conference on Chemical Disaster at Goa, November 16-17, 2007.
 - Delivered **Key Note Address on Global warming and Climate Change on World Environment Day** (June 5, 2007) at Agartala, Tripura, India.
 - Delivered invited seminar lecture on **Atmospheric dust- a significant scavenger of SO2 in India** at International Meteorological Institute, Stockholm University, Sweden, March 17, 2004.
 - Delivered invited talk on **Air Quality Monitoring** during UNESCO Workshop on Environmental Chemistry held at IICT during November 10-15, 2003.
 - Delivered invited talk on **Wet deposition study at Hyderabad** during 1st Workshop of CAD (Composition of Asian Deposition) held at Kuala Lumpur, Malaysia, Nov 21-23, 2002.
 - Delivered invited talk on **Use of Atomic Absorption Spectrometer for metal analysis** during 4th Training Workshop for Forensic Scientists at IICT, Oct, 1-13, 2001.
 - Delivered invited talk on **Atomic Absorption Spectrometer** during Training workshop for Excise Dept, A.P, September, 18-21, 2001.
 - Delivered an invited talk on **Climate change studies and analytical chemistry** at IICT. Invited by Indian Society of Analytical Scientists (ISAS), March, 29, 2001.

- Delivered an invited talk on **Applications of Capillary Electrophoresis in Acid Rain studies and quality control of Herbal Medicine** at IICT, Hyderabad, Sept, 1999.
- Delivered an invited talk on **Chemistry of atmospheric depositions in India** in a symposium 'Science at High Altitudes' held at Darjeeling, May 7-11, 1997.
- Delivered an invited lecture on **Studies on aerosols and precipitation in India** in CSC Workshop on Air quality modeling and atmospheric acidification held at CMRI, Dhanbad, November 4-10, 1996.
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- **Convener/Member of organizing events**
- Convener for DST Project Monitoring Workshop, April, 2007.
- Convener for Composition of Asian Atmospheric Deposition (CAD) Workshop, Nov-Dec, 2006.
- Member, UNESCO Workshop on Environmental Chemistry held at IICT during November 10-15, 2003.
- Member, 8th ISMAS Symposium held at IICT, Hyderabad, December 7-9, 1999.
- Member, CSC Workshop TRAGEAS-97 held at NPL, New Delhi, April 7-11, 1997.
- Member, 2nd inventory workshop of ALGAS (Asian Least-Cost Greenhouse Abatement Strategies) held at NPL, November 18-19, 1996.
- Member, Asian Workshop & Training Course on Inventory of Greenhouse Gases held at NPL, Oct 30- Nov 4, 1995.
- Member, ALGAS (Asian Least-Cost Greenhouse Abatement Strategies) Workshop on Greenhouse Gas Inventory held at NPL, Nov. 6-10, 1995.