IASTA 2018 Aerosol Impacts: Human Health to Climate Change

Nov 26-28, 2018

Organized by
Centre for Atmospheric Sciences
Indian Institute of Technology Delhi

Day 1: Nov 26, 2018

08:30 - 10:00: Registration

10:00 - 11:00: Inaugural session (LH-121)

10:00 - 10:05: Felicitation of the dignitaries by Prof. Sagnik Dey (CAS, IITD)
10:05 - 10:10: Welcome by Prof. Manju Mohan (Head, CAS, IITD)
10:10 -10:20 : Opening Remarks by Prof. V. Ramgopal Rao (Director, IITD)
10:20 -10:35 : Inaugural address by Shri C. K. Mishra (Secretary, GoI, MoEFCC)
10:35 -10:50 : Keynote Address by Prof. Ashutosh Sharma (Secretary, GoI, DST)
10:50 - 10:55: Inaugural Lamp Lighting by the Dignitaries
10:55 -11:00 : Vote of Thanks by Prof. Dilip Ganguly (CAS, IITD)

11:00 - 11:45: HIGH TEA (Foyer of LH-121)

11:45 - 14:00: Session I: National needs: Perspectives of the national agencies [Joint Session] (LH-121)
Chair: Prof. P. C. S. Devara (IASTA President)

DST Aerosol Network program: Dr. Nisha Mendiratta (Scientist-G, DST)
MoES Network on Aerosol: Dr. V K Soni (Senior Scientist, IMD)
MoEFCC Aerosol Program: Shri Ritesh Singh (Joint Secretary, MoEFCC)
SERB Perspectives: Dr. R. K. Mehajan (Scientist-G & Advisor, SERB)
BRNS Program: Prof. Sangeeta (Professor, BARC)
CSIR Program: Dr. S. K. Goyal (Senior Scientist & Head, CSIR-NEERI)
ISRO Aerosol Studies: Dr. Prakash Chauhan (Director, ISRO-IIRS)

14:00 - 15:00: LUNCH (Foyer of LH-121)
15:00 - 16:30: Session II: Aerosol: Overview of Aerosol Studies in India [Joint Session] (LH-121)
Chair: Dr. G. Pandithurai (IITM Pune)

Prof. A. Jayaraman, Former Director, ISRO-NARL (Invited Talk)
Title: Characterizing aerosols from space: Advantages and Challenges

Prof. U. Kulshrestha, JNU (Invited Talk)
Title: Integrated Approach in Air Pollution and Atmospheric Chemistry Research

Prof. S. N. Tripathi, IITK (Invited Talk)
Title: Aerosol-Cloud-Climate Interactions over India

Dr. Neeraj Rastogi, PRL (Invited Talk)
Title: High Time-Resolved Characteristics And Composition Of Ambient Organic Aerosol

16:30 - 17:00: TEA (Foyer of LH-121)

17:00 - 18:30: Session III: Poster and Exhibition (Foyer of Chemistry lab)

19:00 - 21:30: CONFERENCE DINNER (Nalanda Ground, IIT Delhi)

Day 2: Nov 27, 2018

09:00 - 09:25: Special Session (LH-111)
Chair: Dr. Gufran Beig (IITM, Pune)

Prof. James J Schauer, University of Wisconsin-Madison, USA (Invited Talk)
Title: A Weight of Evidence Approach for Atmospheric Particulate Matter Source Attribution for Air Quality Management: A Case Study from the San Joaquin Valley.

09:30 - 11:00: Session IVA: Air quality management [Parallel Session] (LH-111)
Chair: Dr. Manju Mohan (IITD)

09:30 - 09:50: Dr. Sarath Guttikunda (www.urbanemissions.info) (Invited Talk)
Title: Managing Information for Better Air Quality Management In Indian Cities

09:50 - 10:10: Dr. Gufran Beig, IITM (Invited Talk)
Title: What Triggers Environmental emergency of Delhi?
10:10 - 10:20: A164-A Satellite based decision support tool for Monitoring and Forecasting Air Quality, Patadia and Noojipady, NexGen Earth Labs, Greenbelt, Maryland, USA

10:20 - 10:30: A198-Sources And Origin Of Aerosols At A Receptor Site In The World’s Most Polluted Megacity, Bhandari et al., Department of Chemical Engineering, The University of Texas at Austin, USA

10:30 - 10:40: A6-Smart Air Quality Network, the measurement network for the future, Ziegler et al., GRIMM Aerosol Technik Ainring GmbH & CO.KG, Germany

10:40 - 10:50: A47-Ambient Particulate Matter And Ozone Levels At A Suburban Site Of India: Influence Of Biomass Burning And Dust Storm, Kumari et al., Department of Chemistry, Faculty of Science, Dayalbagh Educational Institute, Dayalbagh, Agra

10:50 - 11:00: A181-Size differentiated atmospheric aerosols during firecrackers burning at Raipur, Mahilang et al., School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur

09:30 - 11:00: Session IVB: Aerosol properties [Parallel Session] (LH-108)
Chair: Prof. A. Jayaraman (Former Director, ISRO-NARL)

09:30 - 09:50: Prof. S. Ramachandran, PRL (Invited Talk)
Title: Aerosol Characterization: Challenges

09:50 - 10:00: A208-Effect Of Aerosol Chemistry On Temperature Pattern In North-Western India During Rice And Wheat Crop Residue Burning, Acharya et al, Department of Geography and Environment Management, Vidyasagar University, Midnapore, West Bengal

10:00 - 10:10: A100-Deposition Modeling Of Ambient Aerosols In Human Respiratory System: A 1-Y Long Record From Kanpur In Indo-Gangetic Plain, Rajput et al., Department of Civil Engineering, Indian Institute of Technology Kanpur.

10:10 - 10:20: A27-Study Of Deposition Of Radon Progeny Aerosols At Different Air Velocities, Mishra et al., Radiological Physics and Advisory Division, Bhabha Atomic Research Centre, Mumbai

10:20 - 10:30: A162-Assessment Of Particulate Matter Variation Over World Heritage Site And Steel City Of India, Gogikar and Tyagi, Department of Earth and Atmospheric Sciences, National Institute of Technology Rourkela
10:30 - 10:40: A234- Simulation of volatile organic compounds and secondary organic aerosols over the Indian region by the CAM4-Chem model using CMIP5 and CMIP6 emissions, Vats et al., Centre for Atmospheric Sciences, Indian Institute of Technology Delhi, New Delhi, India

10:40 - 10:50: A20-Chemical Characterization Of Atmospheric Aerosols Over Varanasi, Pratap et al., Department of Physics, Institute of Science, Banaras Hindu University

10:50 - 11:00: A18- Simultaneous Measurements Of Number, Mass And Chemical Compositional Characteristics Of Aerosol Emissions During Fireworks, Joshi et al., Radiological Physics and Advisory Division, Bhabha Atomic Research Centre, Mumbai

11:00 - 11:30: TEA (Foyer of LH-121)

11:30 - 13:00: Session VA: Aerosol-cloud interaction [Parallel Session] (LH-108)
Chair: Prof. S.N. Tripathi (IITK)

11:30 - 11:50: Dr. Thara Prabhakaran, IITM Pune (Invited Talk)
Title: Aerosol-Cloud-Precipitation interaction in deep convective clouds

11:50 - 12:00: A33-Long-Term Measurement Of Cloud Condensation Nuclei Over A High Altitude Hill Station Over Eastern Himalaya, Roy et al., Environmental Sciences Section, Bose Institute, Kolkata

12:00 - 12:10: A77-An Observational Analysis Of Aerosol Cloud Interaction Over India, Das et al., Interdisciplinary Program in Climate Studies, Indian Institute of Technology Bombay

12:10 - 12:20: A163-A Satellite Observation Based Study On Aerosol-Cloud-Precipitation Interaction Over Two Smart Cities Of Odisha During Pre-Monsoon Season, Kant and Panda, Department of Earth and Atmospheric Sciences, National Institute of Technology Rourkela

12:20 - 12:30: A176-Impacts of Dust-Ice-Cloud Interactions on Precipitation Variability, Patel et al., Space & Atmospheric Science Division, Physical Research Laboratory

12:30 - 12:40: A228-Ice Nucleating Particle Properties Of Aerosols In The Himalayan Region, Yadav and Petters, Department of Environmental Sciences, Central University of Jammu, Bagla, Rahya Suchani, Samba, Jammu and Kashmir 181143, India.

12:40 - 12:50: A94-A Study on Hygroscopic Growth of CSI and CSOH Particles, Mishra et al., Nuclear Engineering And Technology Programme, Department Of Mechanical Engineering, IIT, Kanpur 208 016, India
12:50 - 13:00: A88-Transformation and Evolution of Organic Aerosol (OA) During Fog Processing, Mandariya et al., Department of Civil Engineering, Indian Institute of Technology, Kanpur, UP-208016

11:30 - 13:00: Session VB: Aerosols and Human Health [Parallel Session] (LH-111)
Chair: Dr. Pawan Gupta (NASA-GSFC)

11:30 - 11:50: Prof. Lalit Dandona, PHFI (Invited Talk)
Title: The impact of air pollution on deaths, disease burden, and life expectancy across the states of India

11:50 - 12:00: A161-Distributions, Sources, and Health Risks of Atmospheric PM2.5- Bound Polycyclic Aromatic Hydrocarbons in Rural Jamshedpur, India, Kumar et al., Atmospheric Chemistry Laboratory, Department of Chemistry, National Institute of Technology Jamshedpur-831014, Jharkhand, India

12:00 - 12:10: A72-Health risks of PM-bound trace metals in Mumbai slums, Anand et al., Centre for Environmental Science and Engineering, IIT Bombay, Mumbai, 4000076, India.

12:10 - 12:20: A85-Ultrafine and Fine aerosol exposure and effect on heart rate of healthy adults: A case study at IIT Delhi, Baig et al., Department of Civil Engineering, Indian Institute of Technology Delhi

12:20 - 12:30: A82-Emissions of particle-bound elements from on-road vehicle emission: An assessment of potential health risk, Prakash et al., Aerosol Research and Characterization Laboratory, Indian Institute of Technology, Delhi, New Delhi-110016, India.

12:30 - 12:40: A227-Quantification of health benefits due to reduction in anthropogenic PM2.5 resulting from mitigation of key emitting sectors through chemical transport model, Upadhyay et al., Indian Institute of Technology Delhi

12:40 - 12:50: A49-Impact of Environmental Bio-aerosol Pollution on Human Health: A “follow up study” on Exacerbation of COPD, Balyan et al., Environmental Pollution Laboratory, Department of Environmental Studies, University of Delhi

12:50 - 13:00: A101-A Field Survey Based Case Study Assessing The Impacts Of Rural Cooking Practices And Ventilation Conditions On Human Health, Singh et al., Department of Civil Engineering, Indian Institute of Technology, Kanpur

13:00 - 14:00: LUNCH (Foyer of LH-121)
14:00 - 15:30: **Session VIA: Aerosol Measurements & Instrumentation [Parallel Session] (LH-108)**
Chair: Prof. U. C. Kulshrestha (JNU)

14:00 - 14:20: **Dr. G. Pandithurai**, IITM Pune (Invited Talk)
Title: *On the measurements of CCN and Ice Nucleating particles in the atmosphere*

14:20 - 14:30: **A8-Dustmorphology Over Panchgaon, Haryana**, Devara et al., Amity Centre for Ocean Atmospheric Science and Technology (ACOAST) & Amity Centre for Environmental Science and Health (ACESH), Amity University Haryana (AUH), Gurgaon

14:30 - 14:40: **A154-Long-Term Observations Of Black Carbon Aerosol Over A Rural Location In Southern Peninsular India: Role Of Dynamics And Meteorology**, Kiran et al., National Atmospheric Research Laboratory (NARL), Gadanki – 517 112

14:40 - 14:50: **A3-A New Approach for Highly-Efficient, Concentrated Sampling of Aerosol Particles from 10 nm to 10 µm: BioaerosolApplications**, Savage et al., Aerosol Devices Inc., Fort Collins, CO USA

14:50 - 15:00: **A5-Improving Airborne Nanoparticle And Cluster Detection With The Butanol Based Laminar Flow Condensation Nuclei Counters Grimm 5.403 And 5.412**, Steiner et al., University of Vienna, Faculty of Physics, Austria

15:00 - 15:10: **A170-Evolution And Characteristics Of Organic Aerosol In The Urban Atmosphere Through Highly Time Resolved Measurements**, Singh et al., Geosciences Division, Physical Research Laboratory, Ahmedabad – 380009, India


15:20 - 15:30: **A109-Chemical Signatures Of Urban, Open Burning And Dust Transportation In A Tropical Urban Environment Over Eastern Indian Region**, Priyadharshini et al., Department of Civil Engineering, Indian Institute of Technology Kharagpur

14:00 - 15:30: **Session VIB: Aerosols and Climate [Parallel Session] (LH-111)**
Chair: Dr. Harish Gadhavi (PRL)

14:00-14:20: **Dr. R. Krishnan**, IITM (Invited Talk)
Title: The Indian Summer Monsoon Response to GHG and Aerosol Forcing in the IITM ESM

14:20 - 14:30:  A54-Occurrence Of Single And Multiple Aerosol Layers Over The Sub Himalayan Region Of India, Dahutia et al., Department of Physics, Dibrugarh University

14:30 - 14:40:  A105-Impact of fog processing on light absorption properties of brown carbon aerosols in Indo-Gangetic Plain, Choudhary et al., Department of Civil Engineering and APTL at Center for Environmental Science and Engineering (CESE), IIT Kanpur

14:40-14:50:  A157-Role Of Dynamics And Meteorology In The Formation And Maintenance Of Elevated Aerosol Layers Over Indian Region, Ratnam et al., National Atmospheric Research Laboratory, Dept. of Space, Gadanki, Tirupati – 517 502, India

14:50  -15:00:  A3-Effect of atmospheric aerosols on Surface UV radiation, Singh et al., Environmental Sciences and Biomedical Metrology Division, CSIR-National Physical Laboratory, New Delhi

15:00 - 15:10:  A76-Mitigation Of Absorbing Aerosols And Their Climate Impacts Over India: Influence Of Sectoral Interventions, Tibrewal and Venkataraman, Interdisciplinary program in Climate Studies, Indian Institute of Technology Bombay

15:10  -15:20:  A139-The sub-daily variability in aerosols and its radiative effect inferred from ground and satellite measurements, Mukherjee and Vinoj, International Centre for Integrated Mountain Development, Nepal

15:20 - 15:30:  A219-Response Of Indian Summer Monsoon Rainfall To Dust Aerosols Of West Asian Origin At Climatological Scale, Singh et al., Indian Institute of Remote Sensing, Dehradun

15:30 - 16:00:  TEA (Foyer of LH-121)

16:00 - 17:30:  Session VII: Poster and Exhibition (Foyer of Chemistry Lab)

18:00 - 19:30:  IASTA GBM (LH-111)

20:00 - 22:00:  DINNER (Foyer of LH-121)

Day 3: Nov 28, 2018

09:30 - 11:00:  Session VIII A: Absorbing aerosols [Parallel Session] (LH-108)
09:30 - 09:50: Prof. Chandra Venkataraman, IITB (Invited Talk)
Title: Absorbing aerosols influence monsoon rainfall suppression and exacerbate high temperature extremes

09:50 - 10:00: A71-Absorption Properties Of Brown Carbon In Freshly Emitted And Aged Ambient Aerosol Over An Urban Site In Mumbai, Sarkar et al., Interdisciplinary Program in Climate Studies, Indian Institute of Technology, Bombay

10:00 - 10:10: A173-Black Carbon Mixing State Characterization Of Climatically Relevant Size Aerosols, Sarangi et al, Physical Research Laboratory, Navrangpura, Ahmedabad

10:10 - 10:20: A81-Complexity of Short-lived Climate Forcers (SLCFs) in Rural India: Variability and chemistry of Black and Brown carbon and ozone interplay at a unique biomass-burning hotspot of global significance in the Indo Gangetic Plains (IGP), Prakash et al., Department of Civil Engineering, Indian Institute of Technology Delhi

10:20 - 10:30: A122-The Black Carbon Oscillation (BCO) mode detected in the CAIPEEX measurements, Rahul P R C et al., Indian Institute of Tropical Meteorology, Pune

10:30 - 10:40: A14-Fossil Fuel vs Wood Burning Black Carbon Components in Southern Delhi Outskirts, Dumka et al., Aryabhatta Research Institute of Observational Sciences, Nainital

10:40 - 10:50: A51-Estimation Of Radiative Forcing Due To Carbonaceous Aerosols: Their Climate Feedback, Ajay P. et al., Centre for Atmospheric Studies, Dibrugarh University

10:50 - 11:00: A108-Sources And Implication Of Black Carbon (BC) Aerosols Simulated Over Hindukush-Himalayan (HKH) Region On Glacier Snowmelt Runoff, Santra et al., Department of Civil Engineering, Indian Institute of Technology Kharagpur.
10:10 - 10:20: A73-Characterization Of Water Soluble Organic Carbon And Related Functional Groups By H1Nmr At Suburban Mumbai, Yadav et al., IDP in Climate Studies, Indian Institute of Technology Bombay, Powai

10:20 - 10:30: A200-A quartz crystal cascade impactor for real-time ambient measurement, Chen et al., TSI Incorporated, Minnesota

10:30 - 10:40: A199-Improved diffusion loss correction down to 1 nm particles for SMPS measurements, Scheckman et al., TSI Incorporated, Shoreview, Minnesota

10:40 - 10:50: A202-The Use Of A Size Scanning Nephelometer To Constrain Particle Size-Distribution And Their Scattering Properties, Martins et al., Department of Physics, University of Maryland Baltimore County, Baltimore

10:50 - 11:00: A59-Impact Of Surface Layer Energy And Flux Exchanges On The Near Surface Black Carbon Aerosols Over A Tropical Coastal Region Goa, Salim et al., Department of Marine Sciences, Goa University, Taleigao, Goa-403206, India.

11:00 - 11:30: TEA (Foyer of Chemistry Lab)

11:30 - 13:00: Session IXA: Aerosol Modeling [Parallel Session] (LH-108)
Chair: Prof. Chandra Venkataraman (IITB)

11:30 - 11:50: Dr. Sumit Sharma, TERI (Invited Talk)
Title: Air quality simulations to derive PM2.5 source contributions in cities

11:50 - 12:00: A16-Impact Of Urban Terrain On Simulation Of Air-Pollutants, Nishi Srivastava, Department of Physics, BIT Mesra.

12:00 - 12:10: A106-Assessment Of Fine Particle Profile In Surface Mine Using An Artificial Neural Network Model, Dhuliya et al., Department of Environmental Science & Engineering, Marwadi University, Rajkot, Gujarat

12:10 - 12:20: A74-Influence of aerosol radiative effects on atmospheric thermal structure and dynamical response over India in the ECHAM6-HAM2 GCM, Muduchuru and Venkataraman, Interdisciplinary Program in Climate Studies, Indian Institute of Technology Bombay
12:20 - 12:30: A112-Spatio-Temporal Variations Of PM2.5 Mass Over India Using Regional Climate Model (RCM), Srivastava and Bran, Indian Centre for Climate and Societal Impacts Research (ICCSIR), Mandvi, Kachchh, Gujarat

12:30 - 12:40: A206-Long-Term Climatology Of Aerosols Over Tirupati: A Study Using Satellite And Model Simulations, Vijayakumar et al., Department of Physics, Sri Venkateswara University (SVU), Tirupati

12:40 - 12:50: A237-Improvements in the simulation of aerosols over the Indian region using CAM5 model and the SMOG-India (Speciated Multipollutant Generator) emissions inventory, Sharma and Ganguly, Centre for Atmospheric Sciences, Indian Institute of Technology Delhi, New Delhi, India

12:50 - 13:00: A53-Distribution Of Volatile Organic Compounds Over Indian Subcontinent During Winter: Wrf-Chem Simulations Versus Observations, Chutia et al., Centre for Atmospheric Studies, Dibrugarh University

11:30 - 13:00: Session IXB: Aerosol Processes [Parallel Session] (LH-111) Chair: Dr. Neeraj Rastogi (PRL)

11:30 - 11:50: Dr. Harish Gadhavi (Invited talk) Title: Balloon borne measurements of Asian Tropopause Aerosol Layer (BATAL): An Overview

11:50 - 12:00: A171-Reactive Oxygen Species Generation Capability Of Ambient Aerosol Over The Arabian Sea, Patel And Rastogi, Geosciences Division, Physical Research Laboratory, Ahmedabad

12:00 - 12:10: A113-Identification of source region of secondary aerosol during fog evolution in the urban atmosphere "Delhi" India during 2016-17, Tiwari et al., Indian Institute Meteorological Department, New Delhi

12:10 - 12:20: A31-Efficiency Of Rainfall In Scavenging Different Types Of Aerosols Over Eastern Himalayan, Dutta et al., Environmental Sciences Section, Bose Institute

12:20 - 12:30: A39-Comparative study of Aerosol Particle Size Distribution and New Particle Formation events during Summer and Winter Seasons at Delhi, Jose et al., Environmental and Biomedical Metrology Division, CSIR-National Physical Laboratory, New Delhi
12:30 - 12:40: A67- Study Of Size-Segregated Atmospheric Aerosol Over Raipur, Chhattisgarh, India, Nirmalkar et al., Indian Institute of Science Education and Research, Bhopal

12:40 - 12:50: A83- Chemical Characterization Of Ambient Pm$_{2.5}$ At Ghaziabad, Most Polluted Industrial City In India, Gupta et al., Department of Civil Engineering, Indian Institute of Technology, Delhi

12:50 - 13:00: A128: Determination of Deposition Velocity of Mixed Aerosols by Chemical Techniques, Pujala et al., Radiological and Environmental Safety Division, Indira Gandhi Centre for Atomic Research, Kalpakkam

13:00 - 14:00: LUNCH (Foyer of Chemistry Lab)

14:00 - 15:30: Session XA: Air Pollution Exposure: Monitoring and Modeling [Parallel Session] (LH-108)
Chair: Prof. Kirk R. Smith (UC Berkeley)

14:00 - 14:20: A201- Dr. Pawan Gupta, NASA-GSFC (Invited Talk)
Title: Impact of California Fires on Local and Regional Air Quality: The Role of a Low-Cost Sensor Network and Satellite Observations

14:20 - 14:30: A44- Mass Concentration, Enrichment And Health Risk Assessment Through Ingestion, Dermal And Inhalation Exposure Pathways Posed By Heavy Metals In PM2.5, Sah et al., Department of Chemistry, Dayalbagh Educational Institute, Agra, U.P

14:30 - 14:40: A125- Evaluation of simulated PM concentrations using WRF-Chem over India during a pre-monsoon month, Maji and Beig, Indian Institute of Tropical Meteorology, Pune

14:40 - 14:50: A64- Generation Of Nanoaerosols Through Automobiles And Estimation Of Their Effects On Human Health: An Investigatory Case Study In Delhi / NCR, Joshi and Kachhawa, University School of Environment Management, Guru Gobind Singh Indraprastha University

14:50 - 15:00: A26- Study Of Ultrafine Particle Exposure Using Multi-Compartment Model, Krishan et al., Health Physics Division, Bhabha Atomic Research Centre, Mumbai

15:00 - 15:10: A226- Assessing long term ambient PM$_{2.5}$ build-up in Delhi NCT using high resolution satellite dataset, Chowdhury et al., Centre for Atmospheric Sciences, Indian Institute of Technology Delhi, New Delhi, India
15:10 - 15:20: A117-Long-Term Assessment Of Near-Surface Air Pollutants At An Urban Station In Indo-Gangetic Basin, Srivastava et al., Indian Institute of Tropical Meteorology (Branch), New Delhi

15:20 - 15:30: A99-Comparison Of Indoor And Outdoor Bioaerosol Concentration And Composition At Indo-Gangetic Plains And Their Effect On Human Health, Srivastava et al., Environmental Engineering, Department of Civil Engineering, Indian Institute of Technology Kanpur

14:00 - 15:30: Session XB: Aerosol Characterization [Parallel Session] (LH-111)
Chair: Dr. Sachidanand Singh (NPL)

14:00 - 14:20: Prof. Gazala Habib, IITD (Invited Talk)
Title: Multipollutant emissions measurement system for combustion sources: Assessment of on-road transport sector of India

14:20 - 14:30: A133-Physical And Chemical Characterization Of Sodium Combustion Aerosols, Pradeep et al., Safety Engineering Division, Indira Gandhi Centre for Atomic Research, Kalpakkam

14:30 - 14:40: A68-Summertime Black And Brown Carbon (Bc And Brc) In The Eastern Indo-Gangetic Plain, Rana and Sarkar, Department of Earth Sciences, Indian Institute of Science Education and Research (IISER) – Kolkata

14:40 - 14:50: A196- Observed Relation Between Aerosol Optical Properties With Relative Humidity, Paul et al., Department of Environmental Science, Tezpur University Assam

14:50 - 15:00: A119-Chemical Characterization Of Fine Particulate During Fog And Non-Fog Period Of The Winter Season Of 2017-18 At Delhi, Acharja and Ali, Indian Institute of Tropical Meteorology, Pune

15:00 - 15:10: A57-Concentration And Size Segregated Distribution Of Fungal Bioaerosols In An Open Landfill Site In Dehradun, India, Sandeep and Vijay, Environmental Pollution Assessment Laboratory, School of Environment and Natural Resources, Doon University, Dehradun

15:10 - 15:20: A17-Evaluation Of Aerosol Optical Thickness And Its Impact Over Coal Mining Region Using Ground-Based Sunphotometer Observations, Kumar and Krishna, Department of Remote Sensing, Birla Institute of Technology, Mesra

15:20 - 15:30: A156-Chemical Characterization of PM2.5 Collected At A Tropical Rural Site Gadanki, Jain et al., National Atmospheric Research laboratory, Dept. of Space, Gadanki
15:30 - 16:00: **TEA** (Foyer of Chemistry Lab)

16:00 - 17:45: **Closing session (LH-111)**

16:00 - 17:45: **Panel Discussion on Future of Aerosol Science and Technology in India**

**Panelists:** Prof. A. Jayaraman (Former Director, NARL), Prof. Chandra Venkataraman (IITB), Prof. S. Ramachandran (PRL, ISRO), Dr. B. K. Sapra (BARC), Prof. Kirk R. Smith (UC Berkeley), Dr. Akhilesh Gupta (DST), Dr. R. K. Mehajan (SERB), Dr. V. K. Soni (IMD), Dr. R. S. Mahesh Kumar (MoES), Dr. Ajay Raghava (MoEF&CC)

**Moderators:** Prof. Dilip Ganguly (IITD) and Prof. Sagnik Dey (IITD)

**Rapporteurs:** Dr. Thumree Sarkar, Sourangsu Chowdhury and Pawan Vats

**General Guidelines:** Each panelist is requested to give his/her own views on the future of aerosol science and technology in the Indian context. More specifically, each panelist is requested to highlight the following respective topics. Each panelist will get **4-5 minutes** duration for their initial remarks. After all the panelists have given their initial views, each one of them will get another **4-5 minutes** to give their final remarks. The floor will then be open for Q&A and further discussions. Please restrict slides (if you want to show slides) accordingly.

- Prof. A. Jayaraman: Future requirements of aerosol observations
- Prof. C. Venkataraman: Emission inventory and need of model inter-comparison
- Prof. S. Ramachandran: Radiative and climate impacts of aerosols
- Dr. B. K. Sapra: Aerosol instrumentation and radio-active aerosols
- Prof. Kirk Smith: Health burden in India and climate-health co-benefit issues
- Dr. V. K. Soni: Aerosol network - data management and openness
- Dr. Akhilesh Gupta: Role of the funding agencies in promoting aerosol research
- Dr. Ajay Raghava: Linkage between scientists and policymakers
- Dr. R. S. Maheshkumar: Role of inter-ministry coordination in promoting research
- Dr. R. K. Mehajan: Role of SERB in nurturing young talents in scientific research

17:45 - 17:55: **Award Distribution**

17:55 - 18:00: **Wrap Up and Adjourn**