The 2019 Annual Meeting of the CIAAS!
Welcome!!!

An International Conference on Atmospheric Chemistry and Physics in Highly Polluted Environments

A great opportunity to attend professional seminars, present your research or industrial achievements & connect with professionals from academia, industry, and government, all in the Capital of India, New Delhi.

March 22-24, 2019
New Delhi, Delhi, India
**The China-India Association of Atmospheric Scientists (CIAAS)** is a non-profit organization of the scientists from or working in China and India that conduct researches in air pollution and atmospheric sciences. The union is to promote the connection, communication, and collaboration of atmospheric studies between China and India.

This year the CIAAS meeting will be held at the **India Institute of Technology, Delhi** (IIT Delhi). This meeting will feature high-profile lectures, poster session, exhibition, lab tours and special India culture exploration.

---

**Main themes**

(1) Air quality monitoring and modelling  
(2) Air pollution and health  
(3) Emissions and source apportionment  
(4) Aerosol-meteorology interactions  
(5) Atmospheric chemistry  
(6) Indoor air pollution  
(7) Smart and integrated sensors  
(8) Nanotechnologies for air pollution control  
(9) Air pollution control strategies and policies

---

**Special events**

(1) **Talks** on particle measurement instrumentations on March 23-24, 2019.  
(2) **Tours** at one IIT Delhi aerosol research lab on March 25, 2019.  
(3) **Exploration** on India culture on March 26, 2019.

---

**Deadlines**

Registration close on March 24, 2019.

---

**Contact Information**

Official Email: chinaindiaas@yeah.net  
Dr. Sri Kota, Email: harshakota@civil.iitd.ac.in
The 2nd CIAAS Meeting

CIAAS Committees

Scientific Committee

- Shu Tao, Peking University
- Chak Chan, City University of Hong Kong
- Jianmin Chen, Fudan University
- Mindong Chen, Nanjing University of Information Science & Technology
- Pingqing Fu, Tianjin University
- Hong Liao, Nanjing University of Information Science & Technology
- Yele Sun, Chinese Academy of Sciences
- Shuxiao Wang, Tsinghua University
- Qi Ying, Texas A&M University
- Mukesh Khare, Indian Institute of Technology Delhi
- Sharad Gokhale, Indian Institute of Technology Guwahati
- Shiva Nagendra, Indian Institute of Technology Madras

Conference Chairs

- Chair: Hongliang Zhang, Louisiana State University
- Co-Chair: Sri Kota, Indian Institute of Technology Delhi
- Co-Chair: Xinlei Ge, Nanjing University of Information Science & Technology

Local Organizing Committee

- Chair: Sri Kota, Indian Institute of Technology Delhi
- Shovan Sahu, Indian Institute of Technology Delhi
- Shubham Sharma, Indian Institute of Technology Delhi

Program Committee

- Chair: Junfeng Wang, Nanjing University of Information Science & Technology

Award Committee

- Chair: Jianlin Hu, Nanjing University of Information Science & Technology
- Jia Xing, Tsinghua University
- Gazala Habib, Indian Institute of Technology Delhi
The 2nd CIAAS Meeting

Sponsors

Gold

Silver

AERODYNE RESEARCH, Inc.
# Agenda

## Day-1, Friday, March 22, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-10:00</td>
<td>Registration</td>
</tr>
<tr>
<td>10:00-10:45</td>
<td>Inaugural Session</td>
</tr>
<tr>
<td>10:00-10:05</td>
<td>Dr. Sri Harsha Kota (Indian Institute of Technology Delhi)</td>
</tr>
<tr>
<td></td>
<td>Welcome Address and About the Conference</td>
</tr>
<tr>
<td>10:05-10:10</td>
<td>Dr. Hongliang Zhang (Louisiana State University, USA)</td>
</tr>
<tr>
<td></td>
<td>Opening Remarks by the President of CIAAS</td>
</tr>
<tr>
<td>10:10-10:20</td>
<td>Dr. Prashant Gargava (Member Secretary, Central Pollution Control Board)</td>
</tr>
<tr>
<td></td>
<td>Address by Chief Guest</td>
</tr>
<tr>
<td>10:20-10:25</td>
<td>Prof. Ashok Gupta (Deputy Director, Indian Institute of Technology Delhi)</td>
</tr>
<tr>
<td></td>
<td>Address by Patron</td>
</tr>
<tr>
<td>10:25-10:30</td>
<td>Prof. Randeep Guleria (All India Institute of Medical Sciences, New Delhi)</td>
</tr>
<tr>
<td></td>
<td>Address by Guest of Honour</td>
</tr>
<tr>
<td>10:30-10:35</td>
<td>Dr. Anwar Ali Khan (Govt. of Delhi)</td>
</tr>
<tr>
<td></td>
<td>Address by Special Guest</td>
</tr>
<tr>
<td>10:35-10:40</td>
<td>Prof. Mukesh Khare (Indian Institute of Technology Delhi)</td>
</tr>
<tr>
<td></td>
<td>Address by Special Guest</td>
</tr>
<tr>
<td>10:40-10:45</td>
<td>Dr. Suresh Jain (Indian Institute of Technology Tirupati)</td>
</tr>
<tr>
<td></td>
<td>Vote of Thanks</td>
</tr>
<tr>
<td>10:45-11:00</td>
<td>High Tea</td>
</tr>
<tr>
<td>11:00-12:30</td>
<td>Plenary --Session Chair: Dr. Hongliang Zhang (Louisiana State University, USA)</td>
</tr>
<tr>
<td>11:00-11:45</td>
<td>Prof. Randeep Guleria (All India Institute of Medical Sciences, New Delhi)</td>
</tr>
<tr>
<td></td>
<td>Air Pollution and Health Effects</td>
</tr>
<tr>
<td>11:45-12:30</td>
<td>Prof. Shu Tao (Peking University, China)</td>
</tr>
<tr>
<td></td>
<td>Evaluation of Air Quality Trend in China Based on highly Sectorially Resolved Inventories</td>
</tr>
<tr>
<td>12:30-1:30</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>1:30-3:00</td>
<td>Session - Invited session 1 --Session Chair: Prof. Xinlei Ge (Nanjing University of Information Science and Technology)</td>
</tr>
<tr>
<td>Time</td>
<td>Speaker</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>1:30-2:00</td>
<td>Prof. Pingqing Fu (Tianjin University)</td>
</tr>
<tr>
<td>2:00-2:30</td>
<td>Prof. Mukesh Sharma (Indian Institute of Technology Kanpur)</td>
</tr>
<tr>
<td>2:30-3:00</td>
<td>Dr. Doug Worsnop (Aerodyne Research)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>3:15-3:45</td>
<td>Prof. Mukesh Khare (Indian Institute of Technology Delhi)</td>
</tr>
<tr>
<td>3:45-4:15</td>
<td>Prof. Hong Liao (Nanjing University of Information Science and Technology)</td>
</tr>
<tr>
<td>4:15-4:45</td>
<td>Dr. S. K. Goyal (Council of Scientific and Industrial Research – National Environmental Engineering Research Institute)</td>
</tr>
<tr>
<td></td>
<td>Dr. Suresh Jain (Indian Institute of Technology Tirupati)</td>
</tr>
</tbody>
</table>

**Day-2, Saturday, March 23, 2019**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-10:00</td>
<td>Prof. Kalliat Valsaraj (Vice President, Louisiana State University, USA)</td>
<td>Chemistry on Aqueous Surfaces in the Atmospheric Context</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Plenary --Session Chair: Dr. Sri Harsha Kota (Indian Institute of Technology Delhi)</strong></td>
</tr>
<tr>
<td>10:00-11:00</td>
<td></td>
<td><strong>Session - Invited session 3 --Session Chair: Prof. Jianlin Hu (Nanjing University of Information Science and Technology)</strong></td>
</tr>
<tr>
<td>10:00-10:30</td>
<td>Prof. Yele Sun (Chinese Academy of Sciences)</td>
<td>Air Pollution in Beijing: Insights from Aerosol Mass Spectrometry</td>
</tr>
<tr>
<td>10:30-11:00</td>
<td>Prof. Arun Sharma (University College of Medical Sciences, Delhi)</td>
<td>Air Pollution and Health Effects</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>High Tea</strong></td>
</tr>
<tr>
<td>11:00-11:15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:15-12:30</td>
<td></td>
<td><strong>Session - Air quality monitoring and modelling -- Session Chair: Dr. Hao Guo (Louisiana State University)</strong></td>
</tr>
</tbody>
</table>

6 / 23
<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker and Affiliation</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:15-11:30</td>
<td>Jaspreet Kaur (IIS university, Jaipur)</td>
<td>Concentration of Fine Particulate Matter and Gaseous Pollutants During Winter Season Over Jaipur City, Rajasthan India</td>
</tr>
<tr>
<td>11:30-11:45</td>
<td>Jason Cohen (Sun Yat-Sen University, China)</td>
<td>Using Measurements Across Multiple Chemical and Physical Characteristics with Simple Models to Better Constrain and Understand the Sources of East Asian and South Asia Air Pollution Extreme Events</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td>Manshu Madan (TERI University, New Delhi)</td>
<td>Real-time Air Quality and Exposure Assessment Inside the Different Passenger Modes of Transport in Delhi</td>
</tr>
<tr>
<td>12:00-12:15</td>
<td>Mercy Varghese (Indian Institute of Tropical Meteorology, Pune, India)</td>
<td>Aerosol Characteristics over IGP during Monsoon Withdrawal Using Aircraft Observations: A Case Study</td>
</tr>
<tr>
<td>12:15-12:30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Session - Emissions and source apportionment – Session Chair: Dr. Shovan Kumar Sahu (Indian Institute of Technology Delhi)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker and Affiliation</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:15-11:30</td>
<td>Xue Qiao (Institute of New Energy and Low-carbon Technology, Sichuan University, Chengdu, China)</td>
<td>Particulate matter pollution in the Sichuan Basin, southwestern China: source contributions and the concentrations under emission reduction scenarios</td>
</tr>
<tr>
<td>11:30-11:45</td>
<td>Sudhanshu Kumar (Centre for Atmospheric Sciences, Indian Institute of Technology Delhi)</td>
<td>Trends of water-soluble dicarboxylic acids, ketocarboxylic acids and α-dicarbonyls in Mumbai aerosols and their sources</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td>Yunhua Chang (Nanjing University of Information Science and Technology)</td>
<td>Assessing contributions of agricultural and non-agricultural emissions to atmospheric ammonia in a Chinese megacity</td>
</tr>
<tr>
<td>12:00-12:15</td>
<td>Zhaocie Liu (Hebei University of Engineering, China)</td>
<td>Characteristics and sources apportionment of water-soluble ions in PM2.5 of a typical industry city, Handan, China</td>
</tr>
<tr>
<td>12:15-12:30</td>
<td>Prabhat Kashyap (Jawaharlal Nehru University, New Delhi)</td>
<td>Study the Isoprene Emissions in the Urban Ambient Atmosphere of Delhi.</td>
</tr>
</tbody>
</table>

**Session - Air pollution, health and sources -- Session Chair: Dr. Mina Chandra (Ram Manohar Lohia Hospital)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker and Affiliation</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:15-11:30</td>
<td>Nishtha Kathuria</td>
<td>Determinants of lung cancer using epidemiological approach: A case-control study at All India Institutes of Medical Sciences New Delhi</td>
</tr>
<tr>
<td>11:30-11:45</td>
<td>Rajyalakshmi Garaga</td>
<td>Source Apportionment of Size-Segregated Atmospheric Particles and the Influence of Particles Deposition in the Human Respiratory Tract in Five Locations in Assam, India</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td>Pengfei Wang (LSU)</td>
<td>Modeling of PM2.5 and O3 with WRF/Chem over Sichuan Basin, Southwestern China</td>
</tr>
<tr>
<td>12:00-12:15</td>
<td>Lin Li (Nanjing University of Information Science and Technology)</td>
<td>Modeling analysis of O3–precursor relationships in the Nanjing Metropolitan Area of China</td>
</tr>
<tr>
<td>12:15-12:30</td>
<td>Jayanta Moitra (EMTRC Consultants Private Limited)</td>
<td>REQUIREMENT OF GUIDELINES AND STANDARDS FOR ENVIRONMENT FRIENDLY CREMATION IN URBAN AREAS</td>
</tr>
<tr>
<td>12:30-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### The 2nd CIAAS Meeting

#### 1:30 - 1:30-3:00

**Session - Atmospheric Chemistry** -- Session Chair: Dr. Jingyi Li (Nanjing University of Information Science and Technology)

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:30-1:45</td>
<td>Xinlei Ge (Nanjing University of Information Science and Technology)</td>
<td>Secondary organic aerosol formation in atmospheric aqueous phases</td>
</tr>
<tr>
<td>1:45-2:00</td>
<td>Jianzhong Xu (Northwest Institute of Eco-Environment Resource, China)</td>
<td>Chemical characterization of long-range transport biomass burning emissions to the Himalayas: insights from high-resolution aerosol mass spectrometry</td>
</tr>
<tr>
<td>2:00-2:15</td>
<td>Jaiprakash (Indian Institute of Technology Delhi)</td>
<td>Anthropogenic pollutants and ambient air quality in Delhi: Chemical characteristics and source variability</td>
</tr>
<tr>
<td>2:15-2:30</td>
<td>Chandra Mouli Pavuluri (Institute of Surface-Earth System Science, Tianjin University)</td>
<td>Aqueous-phase photooxidation of fatty acids: Formation and transformations of their lower homologues, diacids and related compounds</td>
</tr>
<tr>
<td>2:30-2:45</td>
<td>Chinmay Mallik (Atmospheric Chemistry Dept., Max Planck Institute for Chemistry, Mainz, Germany)</td>
<td>OH measurements as a tool to understand atmospheric chemistry and air mass processing: A case study for the eastern Mediterranean</td>
</tr>
<tr>
<td>2:45-3:00</td>
<td>Andrew Freedman</td>
<td>Using Cavity Attenuated Phase Shift-based Instruments to Measure NO2 and Aerosol Optical Properties</td>
</tr>
</tbody>
</table>

#### 1:30 - 1:30-3:00

**Session - Aerosol-meteorology interactions** -- Session Chair: Dr. Xue Qiao (Sichuan University)

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:30-1:45</td>
<td>Jianping Guo (Chinese Academy of Meteorological Sciences)</td>
<td>The boundary layer height in China in association with aerosols: New insights gained from radiosondes</td>
</tr>
<tr>
<td>1:45-2:00</td>
<td>Duncan Axisa</td>
<td>Towards Understanding Dust-Cloud Interactions</td>
</tr>
<tr>
<td>2:00-2:15</td>
<td>Saifi Izhar (Indian Institute of Technology Kanpur)</td>
<td>Fog scavenging of aerosol particles in the foothills of Himalayas</td>
</tr>
<tr>
<td>2:15-2:30</td>
<td>Rehana Khan (Nanjing University of Information Science and Technology)</td>
<td>Climatology of aerosol optical properties and radiative effects over the Asian Continent from ground-based Sun photometer data</td>
</tr>
<tr>
<td>2:30-2:45</td>
<td>Karishma Hussain (Gauhati University, Guwahati, Assam)</td>
<td>Influence of Meteorology on Individual PAH and their Toxicity in Atmospheric Bulk Deposition in Guwahati, a Major City in Brahmaputra Valley</td>
</tr>
<tr>
<td>2:45-3:00</td>
<td>Zhihao Shi (Nanjing University of Information Science &amp; Technology)</td>
<td>Impacts of climate change and emissions on surface fine particulate matter concentrations in Nanjing, China</td>
</tr>
</tbody>
</table>

#### 1:30 - 1:30-3:00

**Session - Black carbon and brown carbon** : Prof. Yele Sun (Chinese Academy of Sciences)

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:30-1:45</td>
<td>Vikram Choudhary (Indian Institute of Technology Kanpur)</td>
<td>Absorption and Radiative Characteristics of Brown Carbon Aerosols: A Seasonal Comparison</td>
</tr>
<tr>
<td>1:45-2:00</td>
<td>Subrata Mukherjee (Indian Institute of Tropical Meteorology, Pune)</td>
<td>Source apportionment of Black carbon and its connection with aerosol and CCN variability over a high-altitude site, Mahabaleshwar</td>
</tr>
</tbody>
</table>

---

LH318

LH316

LH310
### The 2nd CIAAS Meeting

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00-2:15</td>
<td>Manisha Mishra (Jawaharlal Nehru University, New Delhi)</td>
<td>Wintertime Dynamics of Water-Soluble Organic Carbon (WSOC): A study in the Prayag Region of Indo-Gangetic Plains (IGP)</td>
</tr>
<tr>
<td>2:15-2:30</td>
<td>Yanfang Chen (Nanjing University of Information Science &amp; Technology)</td>
<td>Seasonal light absorption properties of water-soluble brown carbon in atmospheric fine particles in Nanjing, China</td>
</tr>
<tr>
<td>2:30-2:45</td>
<td>Dr. Junfeng Wang (Harvard University)</td>
<td>Characterization of black carbon-containing fine particles in Beijing during wintertime</td>
</tr>
<tr>
<td>2:45-3:00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:00-3:15</td>
<td></td>
<td><strong>Tea Break</strong></td>
</tr>
<tr>
<td>3:15-3:30</td>
<td>Dr. Ramakrishna Ramisetty (TSI)</td>
<td>Instrumentation for Aerosol Particle Characterisation in Highly Polluted Environments</td>
</tr>
<tr>
<td>3:30-3:45</td>
<td>Tesscorn</td>
<td>TBA</td>
</tr>
<tr>
<td>3:45-4:00</td>
<td>Krag Petterson (Cooper Environmental)</td>
<td>Applications of an Aerodyne Aerosol Mass Spectrometer Equipped with a Particle Laser Vaporization Source for on-line Chemically Speciated Measurements of Aerosol Emission Sources</td>
</tr>
<tr>
<td>4:00-4:15</td>
<td>Ed Fortner (Aerodyne)</td>
<td>Applications of an Aerodyne Aerosol Mass Spectrometer Equipped with a Particle Laser Vaporization Source for on-line Chemically Speciated Measurements of Aerosol Emission Sources</td>
</tr>
<tr>
<td>4:15-4:30</td>
<td>Dr. Li Ma (Hexin)</td>
<td>Online Characterization and Source Apportionment of Atmospheric Aerosols by Single Particle Aerosol Mass Spectrometry</td>
</tr>
<tr>
<td>4:30-5:30</td>
<td></td>
<td><strong>Poster Session A</strong></td>
</tr>
<tr>
<td><strong>Day 3, Sunday, March 24, 2019</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:00-11:00</td>
<td><strong>Session - Invited session 4 --Session Chair: Prof. Mukesh Khare (Indian Institute of Technology Delhi)</strong></td>
<td></td>
</tr>
<tr>
<td>9:00-9:30</td>
<td>Dr. V. K. Shukla (Central Pollution Control Board)</td>
<td>Efforts by CPCB to control air pollution in Delhi-NCR</td>
</tr>
<tr>
<td>9:30-10:00</td>
<td>Prof. S. M. Shiva Nagendra (Indian Institute of Technology Madras)</td>
<td>Affordable Cost Sensor Based Air Quality Monitoring System</td>
</tr>
<tr>
<td>10:00-10:30</td>
<td>Dr. S.K. Gupta (Envirotech Instruments Pvt. Ltd.)</td>
<td>Air Pollution in India: Way Forward</td>
</tr>
<tr>
<td>10:30-11:00</td>
<td>Dr. Anubha Goel (Indian Institute of Technology Kanpur)</td>
<td>Particle levels in indoor microenvironments frequented by students: Indicators of environmental health threat</td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
<td>Speaker</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>11:00-11:15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:15-11:30</td>
<td>High Tea</td>
<td></td>
</tr>
<tr>
<td>11:15-11:30</td>
<td>Session - Aerosol physics and chemistry</td>
<td>Hang Liu (Chinese Academy of Sciences)</td>
</tr>
<tr>
<td>11:30-11:45</td>
<td></td>
<td>Hong Geng (Institute of Environmental Science, Shanxi University)</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td></td>
<td>T C Ajith (Space Physics Laboratory, VSSC, ISRO, Thiruvananthapuram, Kerala)</td>
</tr>
<tr>
<td>12:00-12:15</td>
<td></td>
<td>Han Ding (Nanjing University of Information Science and Technology)</td>
</tr>
<tr>
<td>12:15-12:30</td>
<td></td>
<td>Shahzad Gani (The University of Texas at Austin)</td>
</tr>
<tr>
<td>11:15-11:30</td>
<td>Session - Air pollution control strategies</td>
<td>Hao Guo (Louisiana State University, USA)</td>
</tr>
<tr>
<td>11:30-11:45</td>
<td>and policies</td>
<td>Tanya Sharma (TERI School of Advanced Studies)</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td></td>
<td>Shubham Sharma (Indian Institute of Technology Delhi)</td>
</tr>
<tr>
<td>12:00-12:15</td>
<td></td>
<td>Jianlin Hu (Nanjing University of Information Science and Technology)</td>
</tr>
<tr>
<td>12:15-12:30</td>
<td></td>
<td>Xu Yue (Chinese Academy of Sciences)</td>
</tr>
<tr>
<td>11:15-12:30</td>
<td>Session - Meteorology and climatology</td>
<td>Reshmita Nath. (Tsinghua University, Beijing, China)</td>
</tr>
<tr>
<td>11:30-11:45</td>
<td></td>
<td>Ankit Kumar (Indian Institute of Technology Dhanbad)</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td></td>
<td>Debashis Nath (Chinese Academy of Sciences, Beijing, China)</td>
</tr>
<tr>
<td>12:00-12:15</td>
<td></td>
<td>Jian Li (Chinese Academy of Meteorological Sciences)</td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>12:15-12:30</td>
<td>Aslam M Y (Indian Institute of Tropical Meteorology, Pune) Seasonal characteristics of PBLH with meteorological evidence over a high altitude site (Mahabaleshwar)</td>
<td></td>
</tr>
<tr>
<td>12:30-1:30</td>
<td>Lunch Break</td>
<td></td>
</tr>
<tr>
<td>1:30-3:00</td>
<td>Session - Aerosol observation and modelling -- Session Chair: Dr. Mayank Kumar (Indian Institute of Technology Delhi) OMI Satellite Observation and Modelling of NO2 Pollutant Concentration in Critical Locations of the Indian Region: An Artificial Intelligence Approach</td>
<td></td>
</tr>
<tr>
<td>1:30-1:45</td>
<td>Aariz Ahmed (CRIR-NEERI) OMI Satellite Observation and Modelling of NO2 Pollutant Concentration in Critical Locations of the Indian Region: An Artificial Intelligence Approach</td>
<td></td>
</tr>
<tr>
<td>1:45-2:00</td>
<td>Jingyi Li (Nanjing University of Information Science and Technology) Impacts of water partitioning and polarity of organic compounds on secondary organic aerosols over Eastern China</td>
<td></td>
</tr>
<tr>
<td>2:00-2:15</td>
<td>Rajeevan K (National Centre for Earth Science Studies, Trivandrum) 5-year measurement of surface ozone, carbon monoxide and Methane over a tropical station Trivandrum.</td>
<td></td>
</tr>
<tr>
<td>2:15-2:30</td>
<td>Kumari Shweta (Indian Institute of Technology Dhanbad) Vehicular Tailpipe Particulate Matter Pollution Modelling using Operational Street Pollution Model for Dhanbad (India)</td>
<td></td>
</tr>
<tr>
<td>2:30-2:45</td>
<td>Yueying Zhang (Sichuan University) Wet deposition of sulfur and nitrogen in the Mt. Emei World Natural and Cultural Heritage site, West China Rain Zone: Long-term changes and source apportionment</td>
<td></td>
</tr>
<tr>
<td>2:45-3:00</td>
<td>Ningombam (Central University of South Bihar) Monitoring and Characterization of Particulate Matter in Indo-Gangetic region, Patna, Bihar</td>
<td></td>
</tr>
<tr>
<td>1:30-3:00</td>
<td>Session – Atmospheric Research -- Session Chair: Dr. Xu Yue (Chinese Academy of Sciences) GHG Inventory Estimation Based on Stoichiometric Combustion of High Speed Diesel Consumed by Different Sectors in India</td>
<td></td>
</tr>
<tr>
<td>1:30-1:45</td>
<td>Ambasht Kumar GHG Inventory Estimation Based on Stoichiometric Combustion of High Speed Diesel Consumed by Different Sectors in India</td>
<td></td>
</tr>
<tr>
<td>1:45-2:00</td>
<td>Dr. Jayanta Kumar Moitra Requirement of Guidelines and Standards for Environment Friendly Cremation in Urban Areas</td>
<td></td>
</tr>
<tr>
<td>2:00-2:15</td>
<td>Samarul Islam Assessing the role of households use of solid fuels on child mortality in India</td>
<td></td>
</tr>
<tr>
<td>2:15-2:30</td>
<td>Tanisha Ameriya Ambient Air Quality Monitoring and Possible Health Effects Due to Air Pollution in Vishwakarma Industrial area, Jaipur, Rajasthan</td>
<td></td>
</tr>
<tr>
<td>2:30-2:45</td>
<td>Peter Lambaerts Method for direct real-time estimation of volatile and semi-volatile particle fraction from ambient aerosol</td>
<td></td>
</tr>
<tr>
<td>2:45-3:00</td>
<td>Philip Croteau Development and laboratory and field evaluation of a PM2.5 capable Aerosol Chemical Speciation Monitor</td>
<td></td>
</tr>
<tr>
<td>1:30-3:00</td>
<td>Session - Air pollution and health -- Session Chair: Dr. Mina Chandra (Ram Manohar Lohia Hospital) Sources and health risks of ambient polycyclic aromatic hydrocarbons in India</td>
<td></td>
</tr>
<tr>
<td>1:30-1:45</td>
<td>Fenglin Han (Louisiana State University, USA) Sources and health risks of ambient polycyclic aromatic hydrocarbons in India</td>
<td></td>
</tr>
<tr>
<td>1:45-1:50</td>
<td>Yiyi Wang (Nanjing University of Information Premature mortality caused by black carbon from different sources in China</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
<td>Title</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>2:00</td>
<td>Science and Technology)</td>
<td></td>
</tr>
<tr>
<td>2:00-2:15</td>
<td>Vaishnavi Barthwal</td>
<td>Occupational health effects among women construction workers: A perception based cross-sectional study in Delhi and Satellite Towns</td>
</tr>
<tr>
<td>2:15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:30</td>
<td>Pallavi Saxena</td>
<td>Impact of Particulate Matter Concentrations on Lung Functions at residential locations of Delhi, India</td>
</tr>
<tr>
<td>2:45</td>
<td>Gangamma S</td>
<td>Air pollution and Respiratory viral infections: Host gene expression and viral entry processes.</td>
</tr>
<tr>
<td>3:00-3:15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:15-4:30</td>
<td>Session - Atmospheric researches in India --</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Session Chair: Dr. Suresh Jain (Indian Institute of Technology Tirupati)</td>
<td></td>
</tr>
<tr>
<td>3:15-3:30</td>
<td>Shovan Kumar Sahu</td>
<td>Identification of possible sources of PM2.5 using PM2.5 growth process and HYSPLIT for developing a preliminary early warning system for air quality in Indian cities</td>
</tr>
<tr>
<td>3:30-3:45</td>
<td>Saurabh Sonwani and Umesh Kulshrestha</td>
<td>Carbonaceous aerosol variations and sources during monsoon and non-monsoon seasons over Delhi, NCR</td>
</tr>
<tr>
<td>3:45-4:00</td>
<td>Nidhi Malik</td>
<td>Mercury emission and its reduction from coal based thermal power plants in India</td>
</tr>
<tr>
<td>4:00-4:15</td>
<td>Nancy Nancy</td>
<td>Assessment of Ozone &amp; Hydrocarbons in city of Faridabad: A case study focused in the vicinity of petrol filling stations</td>
</tr>
<tr>
<td>4:15-4:30</td>
<td>Bharath Kumar Dudam</td>
<td>Analysis of seasonal variation and sources of PM10 aerosols over eastern coast of India</td>
</tr>
<tr>
<td>3:15-4:30</td>
<td>Session - Meteorology and climatology --</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Session Chair: Dr. Junfeng Wang (Harvard University)</td>
<td></td>
</tr>
<tr>
<td>3:15-3:30</td>
<td>Prashant Rajput</td>
<td>Carbonaceous aerosols during hazy and foggy episodes over Northern India</td>
</tr>
<tr>
<td>3:30-3:45</td>
<td>Ye Wang</td>
<td>Long-distance transport of air pollutants between South Asia and China</td>
</tr>
<tr>
<td>3:45-4:00</td>
<td>Weijun Li</td>
<td>Direct Observations of Fine Primary Particles From Residential Coal Burning: Insights Into Their Morphology, Composition, and Hygroscopicity</td>
</tr>
<tr>
<td>4:00-4:15</td>
<td>Tinku D'Silva</td>
<td>CONTRIBUTION OF ARABIAN SEA ON AIR POLLUTION: A STUDY OVER THIRUVANANTHAPURAM COASTAL REGION</td>
</tr>
<tr>
<td>4:15-4:30</td>
<td>Dimple Pruthi</td>
<td>Air Quality prediction using hybridized ANFIS</td>
</tr>
<tr>
<td>Time (3:15-3:45)</td>
<td>Session: Smart and integrated sensors, nanotechnologies for air pollution control -- Session Chair: Prof. S. M. Shiva Nagendra (Indian Institute of Technology Madras)</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>3:15-3:30</td>
<td>Zhihui Xie</td>
<td></td>
</tr>
<tr>
<td>3:30-3:45</td>
<td>Sensor Node Application in Air Quality Monitoring Network in China</td>
<td></td>
</tr>
<tr>
<td>3:45-4:00</td>
<td>Shraddha Shahane (Indian Institute of Technology Delhi)</td>
<td></td>
</tr>
<tr>
<td>4:00-4:15</td>
<td>Aerosolized Nanoagrochemicals: An emerging air pollutants</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time (3:45-4:30)</th>
<th>Session: Emission and Source Apportionment -- Session Chair: Prof. S. M. Shiva Nagendra (Indian Institute of Technology Madras)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:45-4:00</td>
<td>Gyanesh Kumar Singh (Indian Institute of Technology Kanpur)</td>
</tr>
<tr>
<td>4:00-4:15</td>
<td>Understanding source characteristics of particulate matter (PM1 and PM2.5) and their atmospheric transformation through stable isotope measurements</td>
</tr>
<tr>
<td>4:15-4:30</td>
<td>Kaiyu Chen (LSU)</td>
</tr>
<tr>
<td>4:30-4:45</td>
<td>Source attribution of ground-level Ozone to NOx and VOCs emissions in North China Plain (NCP) based on multiple source apportionment methods</td>
</tr>
<tr>
<td>4:45-4:55</td>
<td>Prashant Patel (CSIR-National Physical Laboratory)</td>
</tr>
<tr>
<td>4:55-5:00</td>
<td>Need of high-volume particulate matter filter sampling to facilitate a wide range of chemical analyses useful for precise source apportionment study.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time (5:30-6:00)</th>
<th>Poster Session B</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:30-6:00</td>
<td>Valedictory Session</td>
</tr>
</tbody>
</table>

| Time (7:30-9:00) | Gala Dinner |

### Posters A

<table>
<thead>
<tr>
<th>Poster</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sateesh M and Vijay Kumar Soni</td>
<td>Climatology of Backward and Forward airmass trajectories accuracy</td>
</tr>
<tr>
<td>Wenjing Li, Mindong Chen and Xinlei Ge</td>
<td>Characterization of related organic compounds of biomass burning at molecular level in Nanjing aerosols</td>
</tr>
<tr>
<td>Chuyong Lin and Jason Cohen</td>
<td>A New Top-Down Approach to Quantifying the Spatial and Temporal Distribution of Urban and Biomass Burning Regions using Decadal Measurements from MOPITT</td>
</tr>
<tr>
<td>Ying Su, Zhong Xie, Shanshan Cao, Jianglei Yu, Shiming Jia and Guoying Wang</td>
<td>Vertical gradients interaction between particulate matters and free radicals in haze-fog</td>
</tr>
<tr>
<td>Kiran Sharma, Narendra Ojha, Imran A Girach, Neetu Sharma, Prabh R. Nair and Narendra Singh</td>
<td>Ozone Pollution in the Doon valley of Central Himalaya:Observations and model results</td>
</tr>
<tr>
<td>Yiming Ma, Jinyuan Xin and Wenyu Zhang</td>
<td>Long-term variations of the PM2.5 concentration identified by MODIS in the tropical rain forest, Southeast Asia</td>
</tr>
<tr>
<td>Arti Choudhary, Pradeep Kumar, Anuradha Shukla, Shovan Sahu and Sri Harsha Kota</td>
<td>Real driving emission in urban traffic corridor from auto-rickshaw fleets in Indian cities</td>
</tr>
<tr>
<td>Anchal Garg and Nc Gupta</td>
<td>Exposure to PM2.5 and associated relative risks of cardiopulmonary and lung cancer mortality during</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Title</td>
</tr>
<tr>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>Samarul Islam</td>
<td>Risks of respiratory illness associated with fuel used for cooking and tobacco smoking among young children in India: An Evidence from recent survey, NFHS-4 (2015-16)</td>
</tr>
<tr>
<td>Shivani Sharma</td>
<td>Detrimental Effect of Air Pollution on Monuments.</td>
</tr>
<tr>
<td>Pradhi Rajeev, Gyanesh Singh, Prashant Rajput and Tarun Gupta</td>
<td>Chemical characteristics of rain water at a polluted site in Central Indo-Gangetic Plain</td>
</tr>
<tr>
<td>Gangamma S. Vaishnavi H.S., Fenita Hephzibah, Ajay Katti and Veeksheetha Veeksheetha</td>
<td>Air pollution Exposure in South Indian Cities: Airborne biological particle and Reactive oxygen species</td>
</tr>
<tr>
<td>Sudeşh Yadav and Prof. U.C. Kulshrestha</td>
<td>Short term study of SO2 and NO2 abundance and transport in relation with the chemical components of dustfall at urban and rural site in Delhi NCR.</td>
</tr>
<tr>
<td>Garvita Parikh</td>
<td>AIR POLLUTION AND HEALTH</td>
</tr>
<tr>
<td>Anil Kumar</td>
<td>Cycling of exhaust and non-exhaust pollutants on urban road networks</td>
</tr>
<tr>
<td>Shristy Patel</td>
<td>ADVERSE HEALTH EFFECTS DUE TO INDOOR AIR POLLUTION</td>
</tr>
<tr>
<td>Chandraprakash Tiwari and Jayesh Kumar Singh</td>
<td>Various Air Pollutants: Their source, Impact on Animals, Birds and Fish Health and prevention</td>
</tr>
<tr>
<td>Chandraprakash Tiwari, Avinash Kumar Shukla and Jayesh Kumar Singh</td>
<td>Burning plastics and other waste: their concern, impact and prevention strategies</td>
</tr>
<tr>
<td>Jayesh Kumar Singh and Chandra Prakash Tiwari</td>
<td>An Analysis and study of epigenetics due to pollution</td>
</tr>
<tr>
<td>Nidhi Singhvi</td>
<td>Nanotechnologies for Air Pollution Control</td>
</tr>
<tr>
<td>Jagriti Suneja and Sudhir Kumar Sharma</td>
<td>Temporal variation of SO2 over an urban site of Delhi</td>
</tr>
<tr>
<td>Yash Jain</td>
<td>Transport of Biomass Burning Emissions from the neighboring States to Delhi</td>
</tr>
<tr>
<td>D. Syed Kasim, J. Ganesh, V.R. Sarma Dhulipala</td>
<td>Simulation studies for Air pollution monitoring</td>
</tr>
<tr>
<td>Arpit Katiyar and Mukesh Sharma</td>
<td>CONTRIBUTION OF DIFFERENT SOURCES TOWARDS THE CO CONCENTRATION IN VARANASI USING AERMOD</td>
</tr>
<tr>
<td>Tathya Sharma</td>
<td>Air Pollution in Cement Industry and its control</td>
</tr>
<tr>
<td>Garvita Pareek</td>
<td>Air Pollution and Health</td>
</tr>
<tr>
<td>Shrishil Patel</td>
<td>Indoor air pollution</td>
</tr>
<tr>
<td>Lei Huang</td>
<td>Quantitative Analysis of Health Risk Perception, Exposure Levels, and Willingness to Pay/Accept of PM2.5 during the 2014 Nanjing Youth Olympic Games</td>
</tr>
</tbody>
</table>

**Posters**

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sameer Singh and Sharad Gokhale</td>
<td>Fossil-fuel and biomass originated black carbon and its seasonal contribution in the rural tract of Brahmaputra River basin</td>
</tr>
<tr>
<td>Dan Zhu, Zhiyong Zhang and Liangchen Ma</td>
<td>Analysis the Characteristics and formation mechanism of a heavy air pollution episode</td>
</tr>
<tr>
<td>Ashutosh Pathak</td>
<td>Comparative study of Variation in Exhaust Emissions from 2W (3 Major types) in Kanpur city (Year 2007, 2010 &amp; 2013) and health effects scenario</td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Indoor ammonia abundance at two sites in Delhi.</td>
<td>Ankita Katoch</td>
</tr>
<tr>
<td>Study of Atmospheric Reactive Nitrogen (Nr) in Relation with Inorganic Carbon in Rainwater at an Agriculturally Intensive Site of Western Uttar Pradesh Region, India.</td>
<td>Moh Naseem and Umesh Chand Kulshrestha</td>
</tr>
<tr>
<td>AIR QUALITY DEGRADATION AND COMPOSITION OF PM2.5 AT RAIPUR CITY DURING DIWALI FESTIVAL</td>
<td>Jaya Dammani, Deepak Sinha and Shankar G. Aggarwal</td>
</tr>
<tr>
<td>MITIGATION OF AIR POLLUTION BY VEGETATION IN URBAN AREAS, DELHI</td>
<td>Meenakshi Pawar</td>
</tr>
<tr>
<td>Air pollution and Inflammation: Invitro studies on airborne particulate matter from biomass fuel burning houses</td>
<td>Gangaem S and Sanauilla Desai</td>
</tr>
<tr>
<td>Estimation of particulate matter concentration from MODIS satellite aerosol optical depth during high fire events</td>
<td>Bharath Kumar Dudam</td>
</tr>
<tr>
<td>Satellite Derived Spatio-Temporal Trends of air pollutants over Delhi and its Outer region.</td>
<td>Sneha Dhankar and Krishan Kumar</td>
</tr>
<tr>
<td>Advancement in Sequestration of Carbon by Carbon Nanotube membranes</td>
<td>Jayesh Kumar Singh and Chandra Prakash Tiwari</td>
</tr>
<tr>
<td>Metal based Non photocatalytic Nanoparticles for Air Pollutants Degradation</td>
<td>Chandraprakash Tiwari and Jayesh Kumar Singh</td>
</tr>
<tr>
<td>Nano-lanthanide coated nanotubes for extraction of charged species.</td>
<td>Jayesh Kumar Singh and Chandra Prakash Tiwari</td>
</tr>
<tr>
<td>Optimization of energy consumption &amp; CO2 emissions to scrutinize the energy performance in Office buildings.</td>
<td>Suresh Pandian and Ravalnath Shikhare</td>
</tr>
<tr>
<td>Studies on The Quality of Rainwater Runoff At Various Land Use Classification In Dhanbad (India)</td>
<td>Kachchap Chandra Bala and Suresh Pandian Elumalai</td>
</tr>
<tr>
<td>Air pollution challenge: Need for inter-agency science-based policy interventions in megacity Delhi</td>
<td>Vivek Negi</td>
</tr>
<tr>
<td>NANOCELLULOSE FROM AGRICULTURAL WASTE FOR AIR POLLUTION CONTROL</td>
<td>Mandeep Kaur, Praveen Sharma, Santosh Kumari</td>
</tr>
<tr>
<td>Study of the diurnal variation of atmospheric electrical conductivity with radon concentration at Mysuru</td>
<td>M P Pranamya, M S Chandrashekara and K S Pruthvi Rani</td>
</tr>
<tr>
<td>Studies on Radon Exhalation Rate from Construction Materials of Mysuru District, Karnataka State, India</td>
<td>M S Chandrashekara, M P Pranamya and K S Pruthvi Rani</td>
</tr>
<tr>
<td>Chemical characteristics of brown carbon in atmospheric particles at a suburban site near Guangzhou, China</td>
<td>Yiming Qin, Chak Chan, Yong Jie Li and Hao Bo Tan</td>
</tr>
<tr>
<td>High-resolution ammonia emissions inventory in Yangtze River Delta, China, 2006-2014</td>
<td>Xingna Yu and Li Shen</td>
</tr>
<tr>
<td>Respiratory health effects of indoor air pollution</td>
<td>Sonali Sharma</td>
</tr>
</tbody>
</table>
## Fees

<table>
<thead>
<tr>
<th>Type</th>
<th>National (INR)</th>
<th>International (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Personnel</td>
<td>5000</td>
<td>300</td>
</tr>
<tr>
<td>Academician/Scientist</td>
<td>2500</td>
<td>300</td>
</tr>
<tr>
<td>Student/Research Scholars</td>
<td>1500</td>
<td>50</td>
</tr>
</tbody>
</table>
The 2nd CIAAS Meeting

Selected speakers

Shu Tao, Academician of Chinese Academy of Sciences
Professor, Department of Environment, Peking University

Dr. Douglas R. Worsnop
Ph.D., Physical Chemistry, Harvard University
Expert in the chemistry and heterogeneous reactions of atmospheric aerosols
A Fellow of AAAS and AGU

Hong Liao, Professor
Dean of Environmental Science & Engineering, NUIST
An author of IPCC5 and IPCC6 Report

Pingqing Fu, Professor
Institute of Surface Earth System Science, Tianjin University
The 2nd CIAAS Meeting

Yele Sun, Professor
Research on the physical and chemical properties, sources and generation mechanism of atmospheric aerosols and their effects on air quality

Kalliat Valsaraj, Professor
Vice President for Research & Economic Development at Louisiana state university (LSU)
The 2nd CIAAS Meeting

Location

**Day One:** The Seminar Hall, IIT Delhi on 22nd March 2019 at 10 AM

**Day Two:** Lecture Hall Complex of IIT Delhi

**Day Three:** Lecture Hall Complex of IIT Delhi

**Gala Dinner** on 24th March 2019 at 7:30 PM in the Red Square in front of the Central library, IIT Delhi.
Call for Papers on Special Issue: Air pollution in developing countries

The prestigious journal *Chemosphere* *(IF: 4.427) (ISSN: 0045-6535)* is currently running a special issue entitled "Air pollution in developing countries". As we are acting as guest editors for this issue, we kindly invite you to consider submitting your full paper to this special issue.

**Submission Period: 1st March 2019- 1st March 2020**

[https://ees.elsevier.com/chem/default.asp](https://ees.elsevier.com/chem/default.asp)

To ensure that your manuscripts are correctly identified for inclusion into the special issue, it is important for you to select “VSI: Air Poll Developing” when you reach the “Article Type” step in the submission process.

**Guest editors:**

Dr. Hongliang Zhang

Assistant Professor, Department of Civil and Environmental Engineering, Louisiana State University, Baton Rouge, Louisiana, USA

Email: hlzhang@lsu.edu

Dr. Xinlei Ge

Professor, School of Environmental Science and Engineering, Nanjing University of Information Science and Technology, Nanjing, Jiangsu, China.

Email: caxinra@163.com

Dr. Sri Harsha Kota

Assistant professor, Department of Civil Engineering, Indian Institute of Technology Delhi, Delhi, India

Email: harshakota@gmail.com
Money

Local currency is the India Rupee, with the approximate value 1 RMB = 10.41 Rupee, 1 USD = 70.38 Rupee (Rates on 13 Jan, 2019). The exchange rates are subject to daily variations.

Indian currency is decimal. Notes come in 2000, 500, 200, 100, 50, 20, 10, 5, 2 and 1 Rupee denominations. Coins come in 100, 10, 5, 2, 1 Rupee denominations.

Major currencies can be exchanged at the hotels or banks nearby. The most common credit cards (e.g., Visa, MasterCard) are accepted at major hotels and stores.
Electricity

India uses 230 Volts, 50 Hz alternating current as the power source. Plugs and sockets have either grounded / earthed 3 Pin connections (Type D) or ungrounded 2 pin connections (Type C). The two-pin plug is also called the Europlug. If your appliance’s plug has a different shape, you may need a plug adapter.

Weather and Climate

For information on the temperature during March, daily weather forecasts, etc., please visit the websites either at: https://www.accuweather.com/en/in/delhi/202396/weather-forecast/202396.
The India Standard Time (Delhi Standard Time) is GMT+5:30 hours.