**Session: Deterioration of Human Health due to Air Pollution**

**Date: 29 August 2019**

**Duration: 1hr**

**Format: Panel discussion**

Air pollution is becoming a major health problem that affects millions of people worldwide. The World Health Organization estimates that every year, 2.4 million people die because of the effects of air pollution on health. Key harmful pollutants to human health include particulate matter (PM2.5 and PM10), carbon monoxide (CO), ozone (O3), black carbon (BC), sulfur dioxide (SO2) and nitrogen oxides (NOx).

Air pollution is often not visible to the naked eye as the size of the pollutants are smaller than the human eye can detect. They can become visible in some situations for example in the form of sooty smoke from the open burning of crop residues or other waste, as well as from burning wood, coal, petrol and diesel fuels for cooking and heating, transport or power production.

According to WHO, India is home to the world’s 14 most polluted cities. Majority of cities are caught in a toxic web as air quality and fails to meet health-based standards. With the economy booming in many of India’s cities since the turn of this century, outdoor air pollution has become a major health hazard and a major killer. During early part of November 2018, Delhi’s air quality index had jumped to 574, which falls in the "severe-plus emergency" category according to data by SAFAR (System of Air Quality and Weather Forecasting and Research). Last year, 1.2 million people lost their lives to pollution, according to research by the India State-Level Disease Burden Initiative published in [The Lancet Planetary Health](https://www.sciencedirect.com/science/article/pii/S2542519618302614?via%3Dihub). The study estimated that the highest PM2.5 exposure level was in Delhi, followed by the other North Indian states of Uttar Pradesh, Bihar and Haryana.

The session will look at the current status of Indian cities on air pollution, its impact on human health and solutions prevailing to deal with the crisis.