Greetings from CERCA!

Covid Lockdown is taking a toll in terms of mental fatigue. Hope you and families are safe. As social distancing and work-from-home becomes the new normal, finding solutions to this problem becomes equally important. To take care of yourself and beat this fatigue, it is important to accept the difficult emotional experience and the fact of going through these uncertain times. Instead of attempting to make the future predictable, it is important to focus on activities that you can control on a daily basis. Amidst all the professional and personal work, one should take out some Me-time where one can do things that keeps our minds calm and relaxed.

CERCA Team

Upcoming Event

Celebrating International Day of Clean Air for Blue Skies

CERCA, Indian Institute of Technology (IIT) Delhi is organising a Webinar on Clean Air Goals for India on 7th September 2020 from 10:00 AM to 12:45 PM on the occasion of International Day of Clean Air for Blue Skies.

CERCA Events

World Bank co-sponsored Project on Developing Air Quality Management model for the Indo Gangetic Plains

CERCA-IITD to establish an Air Quality Management modelling
network among states of Indo Gangetic Plain to support cost effective AQM in the overall IGP region. The main elements of AQM modelling for the IGP would include methods and protocols monitoring, AQ monitoring, Emission inventory, Source apportionment, Health impacts, cost effectiveness and AQM planning.

**NASA Citizen Science Project**

This project aims to explore the use of low-cost sensors in measuring air pollution through the engagement of citizens. Adequate ground-based measurements of air quality do not exist in most of the country. Satellite data are used to fill this gap, but satellites cannot provide data at nighttime. To provide the required temporal coverage at a minimum cost, low-cost sensors became very popular in the last few years.

**IIT Delhi signed MoA with Bihar State Pollution Control Board**

The Bihar State Pollution Control Board has signed a 'Memorandum of Agreement' (MoA) with IIT Delhi on 8th August 2020 for setting up of a geographical information system (GIS) based platform for air quality management in the state. Prof. Sagnik Dey, from Centre for Atmospheric Sciences and Coordinator CERCA IITD, will be leading this project with his counterpart Mr. S.N Jayaswal of Bihar State Pollution Control Board, Patna.

**CERCA in the News**

**IIT Delhi And Bihar State Pollution Control Board Tie Up To Establish GIS-Based AQM System**

The Indian Institute of Technology Delhi (IIT Delhi) and Bihar State Pollution Control Board have signed an agreement to establish a GIS-based information system for air quality
management in Bihar. This agreement will enable identifying sources and transport of PM 2.5 at a “very high resolution and help the board to identify effective mitigation measures.

**In Bengal, real-time satellite data to be used for round-the-clock air quality management**

Till date satellite data has been used by scientists for research, but this is for the first time that real-time satellite data would be used for air quality management in cities on a day-to-day basis, said coordinator of the Centre of Excellence for Research on Clean Air (CERCA).

**Scientists use lockdown to get data on unpolluted Delhi air**

The shutdown is not limited to a particular sector like industry or vehicles. Neither is it a city-level shutdown. It is a pan-India shutdown, so chances of pollution coming from outside has also been minimized. We are gathering data as this an opportunity that Delhi will not get in years to come said Coordinator of CERCA at IIT Delhi.

**Opinion Papers**

**And now, some clean air business...**

The Covid-19 pandemic is a disaster of epic proportions that hit the world in 2020. There has been a silver lining, though: the air pollution levels, primarily due to the reduced vehicular, industrial and other human activities. The greatest disservice to the cause of clean air - one that affects every Indian, human and the entire creation - is to stop here. That will mean letting go of this windfall and an opportunity of a lifetime to think, reflect, plan and act. For once, can our polity and governance system anticipate an issue and win visionary accolades?
Near future anthropogenic aerosol emission scenarios and their direct radiative effects on the present day characteristics of the Indian summer monsoon

Various air pollution mitigation scenarios have been proposed to improve the existing severe air quality problem over South Asia. Here we use a regional climate model to examine the response of the Indian summer monsoon (ISM) to two projected anthropogenic aerosol emission scenarios.

Significance of PM2.5 Air Quality at the Indian Capital

In New Delhi, the capital city of India, concentrations of regulated air pollutants often exceed the Indian national ambient air quality standards (INAAQS). As the sources of these pollutants differ, it is of utmost priority to understand the most dangerous air pollutant to formulate better control strategies in the city.

Delhi Air Quality Trend for 24 hr. Daily Average

About 29% decrease in PM2.5 levels in August 2020 in comparison to August 2019 have been observed. The measures taken by governments because of the spreading of the novel coronavirus, and the partial
shutdown of factories, commercial establishments, and vehicular movement, has resulted in a drop in the concentration levels across Delhi in the month of August.

*Data Source: CPCB*

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**News Highlights**

**Punjab plans to shift brick kilns from coal to CNG**

Tandrust Punjab Mission director Kahan Singh Pannu has said the state government will explore the possibilities to shift brick kilns from coal to compressed natural gas (CNG) to check air pollution. There are around 2,200 active brick kilns in Punjab.

*Source: The Times of India*

**Ghaziabad admin directs departments to take pollution abatement measures**

In view of the approaching winter season which in the past has seen high air pollution levels in Ghaziabad, the district administration on Monday held a review meeting with different departments and agencies. The administration directed that the pollution abatement measures should be kicked off well before the onset of winter season.

*Source: Hindustan Times*

**Oxford council to discuss air pollution plan today**

A CITY-wide plan to try to change people’s behaviour to cut air pollution in Oxford will be discussed today. The city council says its plan could be 'the first of its kind in the UK'.

*Source: Oxford Mail*

**Air pollution in Ireland associated with strokes, research finds**
Scientists have found that air pollution in the winter is associated with more hospitalisations for all strokes in Dublin.

Source: Science Daily

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