SEMINAR SERIES 2020 - 2021

SOUTHERN ONTARIO CENTRE FOR ATMOSPHERIC AEROSOL RESEARCH University of Toronto

Think globally, breathe locally: measuring inequity in air pollution from the global to neighborhood scales



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Air pollution exposure is the leading environmental risk for premature death globally and a key cause of urban health disparities. Future choices about energy and transportation will profoundly change the levels and spatial patterns of urban air pollution around us. Yet pervasive gaps in current environmental measurement systems limit our understanding and predictive ability about the air we breathe. New techniques for measurement and data analysis can illuminate the relationships between urban infrastructure, atmospheric emissions, and population exposures to air pollution.

Dr. Apte presents two interlinked analyses that help frame the urban air pollution problem at the global and local scales. First, Dr. Apte shows how particle air pollution levels have evolved over the past two decades in every city in the world, with a sharp global divergence between cities in lower and higher-income countries. Second, using Google Street View cars and other specially equipped mobile air pollution laboratories, show how air pollution varies at fine spatial scales within individual neighborhoods in the Bay Area and Bangalore, revealing unexpected patterns of sources and pollution. Results from each study emphasize profound considerations of equity and environmental justice, which Dr. Apte will discuss as a cross-cutting theme in this work.

Wednesday, May 12, 2021 3:00 - 4:00PM Microsoft Teams Meeting - Click here to join the meeting

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we study the air you breathe