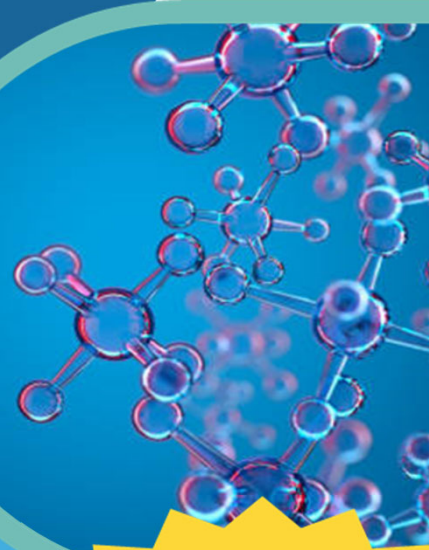


Air, Climate, and Energy Research Webinar Series

Modeling PFAS Air Emissions, Chemistry, and Deposition



A certificate of
attendance will be
offered for
this webinar

Tuesday, May 18, 2021 from 3:00 to 4:00 pm ET

Registration: <https://www.eventbrite.com/e/149182521939>

Per- and polyfluoroalkyl substances (PFAS) are a class of synthetic compounds, and there is growing concern that exposure to PFAS can lead to adverse health outcomes. PFAS air emissions may contribute to human exposure through direct inhalation or ingestion of contaminated food and water after deposition to ecosystems.

This webinar will discuss air quality modeling techniques being developed to quantify the atmospheric air concentrations and deposition rates of PFAS from large fluorochemical manufacturers. Specifically, the Community Multiscale Air Quality model (CMAQ) is applied to a case study in Eastern North Carolina to model the PFAS emissions and transport at fine scale (1 km horizontal resolution). These results are an important step in understanding the behavior of significant PFAS emissions from a point source, and can be used to inform PFAS emission inventory development as well as studies quantifying exposure and biological effects.



Emma D'Ambro, Ph.D.

Emma is a chemist with EPA's Office of Research and Development (ORD), Center for Environmental Measurement and Modeling (CEMM). She joined the EPA as an ORISE postdoc in 2019 working with Drs. Ben Murphy and

Havala Pye to understand the emissions and fate of PFAS using the Community Multiscale Air Quality Modeling System (CMAQ). She started a permanent position at the EPA in 2021 and looks forward to continuing this work. Emma holds a B.S. in chemistry from Le Moyne College and a Ph.D. in analytical chemistry from the University of Washington.



Ben Murphy, Ph.D.

Ben is a physical scientist with EPA's ORD, CEMM, specializing in the study of atmospheric particulate matter pollution. Among his research interests are improving air quality model representations of particulate- and gas-

phase organic emissions, secondary organic aerosol formation, organic aerosol aging, and formation and evolution of ultrafine particles in the U.S. His work is primarily based on development of CMAQ. Ben holds a B.E. in chemical engineering from Vanderbilt University and a Ph.D. in chemical engineering from Carnegie Mellon University.

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