



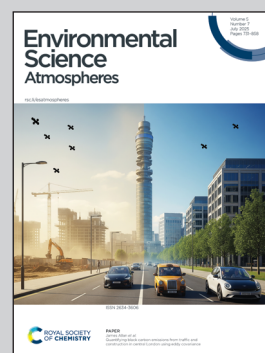
Showcasing research from the Osthoff laboratory, Department of Chemistry, University of Calgary, Alberta, Canada.

Thermal decomposition of peroxyacrylic nitric anhydride (APAN)

Graduate student Amanda and undergraduate students Kevin and Nicole studied the thermal decay kinetics of APAN ($\text{CH}_2=\text{CHC}(\text{O})\text{O}_2\text{NO}_2$) in lab experiments. While drafting the manuscript, the group deployed to the field to quantify nitrogen oxides in Calgary Inglewood. By chance, the air quality rapidly deteriorated to “among the worst in the world” due to upwind wildfires, obscuring the sky (photo). High APAN concentrations arrived with the acrid air, allowing evaluation of the lab results under real-world conditions while catching a glimpse of a future in which climate change driven wildfires dominate air pollution.

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As featured in:



See Hans D. Osthoff *et al.*, *Environ. Sci.: Atmos.*, 2025, **5**, 801.