



## **The perils of housecleaning and other tales from the mop**

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The House Observations of Microbial and Environmental Chemistry (HOMEChem) study provided four weeks of comprehensive state-of-the-art measurements of trace gases, particles and surface chemistry in a test house to explore the role of cooking, cleaning and occupancy in controlling indoor chemistry. Volatile organic compound (VOC) levels indoors are consistently high relative to outdoor concentrations, as evidenced by the observed monoterpene isomers alpha pinene, beta pinene and limonene. These monoterpenes have both cooking and cleaning related sources. However, despite the high VOC concentrations, little evidence suggests substantial secondary organic aerosol formation - likely due to the low oxidant loadings during HOMEChem. However, we do observe some evidence for chlorine chemistry during bleach cleaning.