HYDROXYL RADICAL REACTIONS WITH VOLATILE ORGANIC COMPOUNDS AT THE AIR/LIQUID INTERFACE USING BROAD BANDWIDTH SUM FREQUENCY GENERATION SPECTROSCOPY

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Both anthropogenic and naturally occurring VOCs react with OH radical to produce ozone in the troposphere. While gas phase reactions have been well characterized, the heterogeneous interactions have yet to be studied. Employing BBSFG to probe the air/liquid interface of monolayers of VOCs spread on water surfaces during OH radical reactions gives insight into the contributions from aerosol surfaces.