

Supporting Information of:

**Reactions of Criegee Intermediates with Alcohols
at Air-Aqueous Interfaces**

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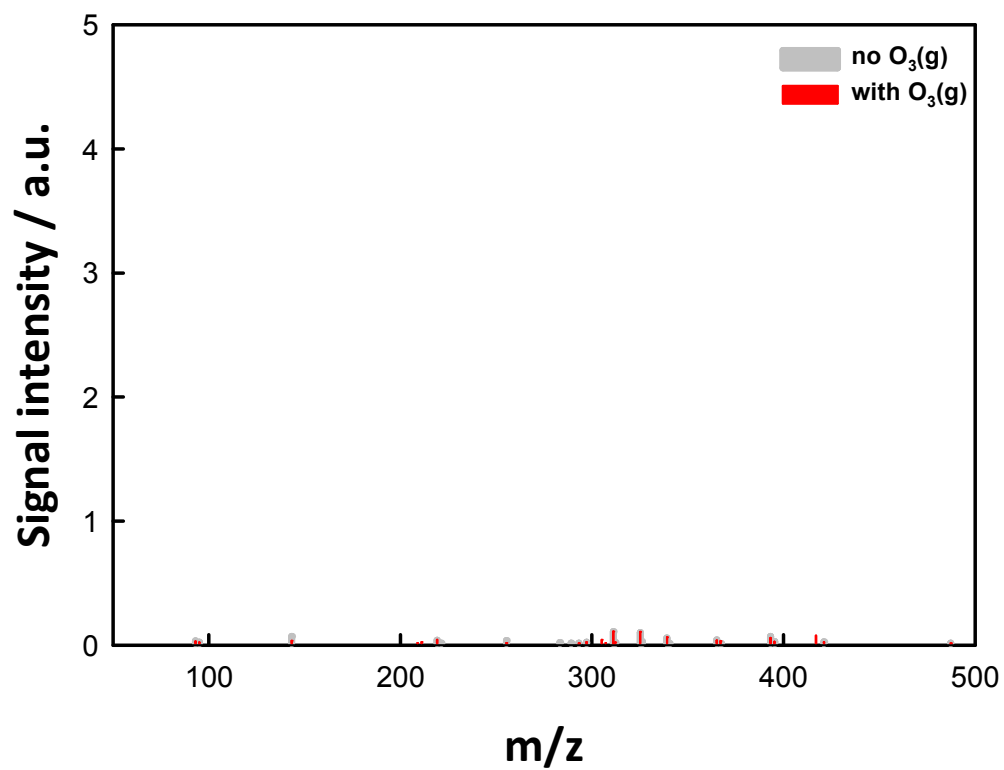


FIGURE S1: Negative ion mass spectra from 100 mM 1-octanol + 0.2 mM NaCl in AN:W (4:1 = vol:vol) solution microjets in the absence (gray) and presence of O₃(g) (red, $E = 2.4 \times 10^{11}$ molecules cm⁻³ s). Note that no detectable products appear above background levels. See text for details.

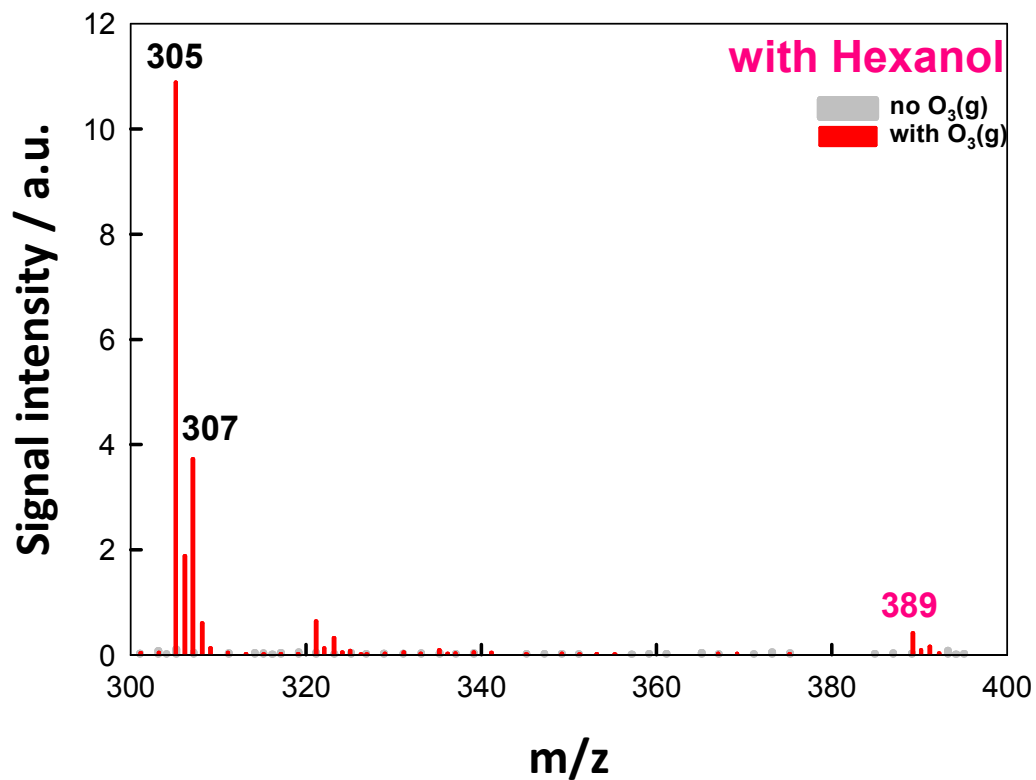


FIGURE S2: Negative ion mass spectra from 1 mM β -C + 0.2 mM NaCl + 100 mM 1-hexanol in AN:W (4:1 = vol:vol) solution microjets in the absence (gray) and presence of O₃(g) (red, $E = 4.3 \times 10^{10}$ molecules cm⁻³ s). The m/z 305;307 and 389;391 signals correspond to Cl⁻-adducts of α -hydroxy-hydroperoxides and α -alkoxy-hydroperoxides (C₂₁ ether species), respectively. See text for details.

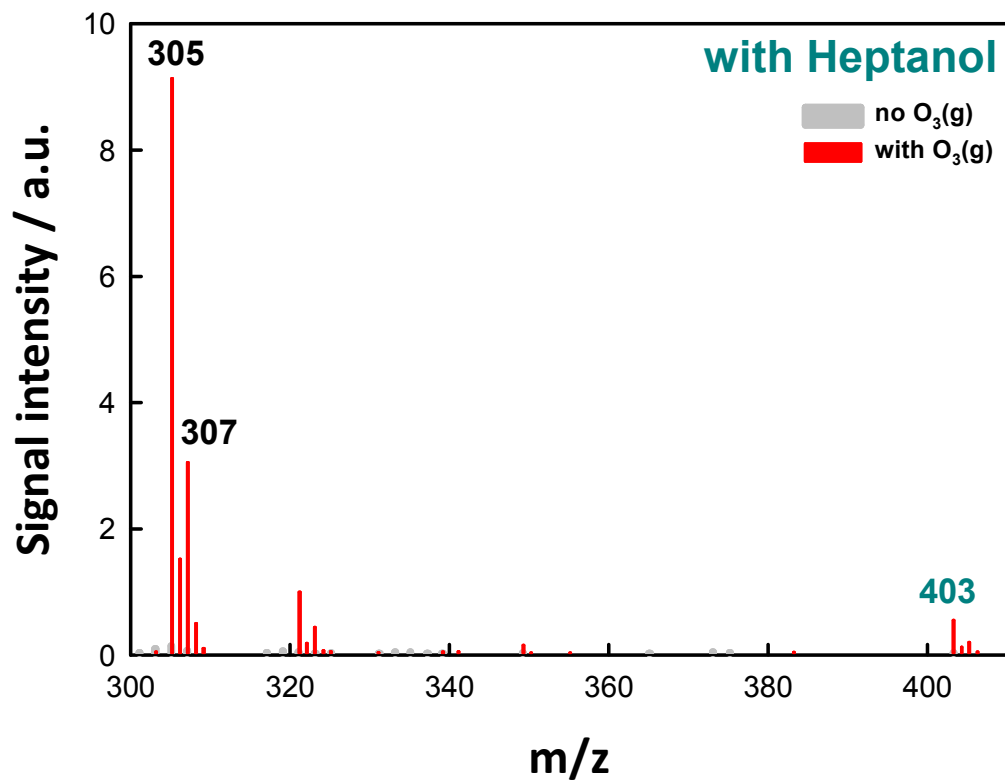


FIGURE S3: Negative ion mass spectra from 1 mM β -C + 0.2 mM NaCl + 100 mM 1-heptanol in AN:W (4:1 = vol:vol) solution microjets in the absence (gray) and presence of O₃(g) (red, $E = 3.9 \times 10^{10}$ molecules cm⁻³ s). The m/z 305;307 and 403;405 signals correspond to Cl⁻-adducts of α -hydroxy-hydroperoxides and α -alkoxy-hydroperoxides (C₂₂ ether species), respectively. See text for details.

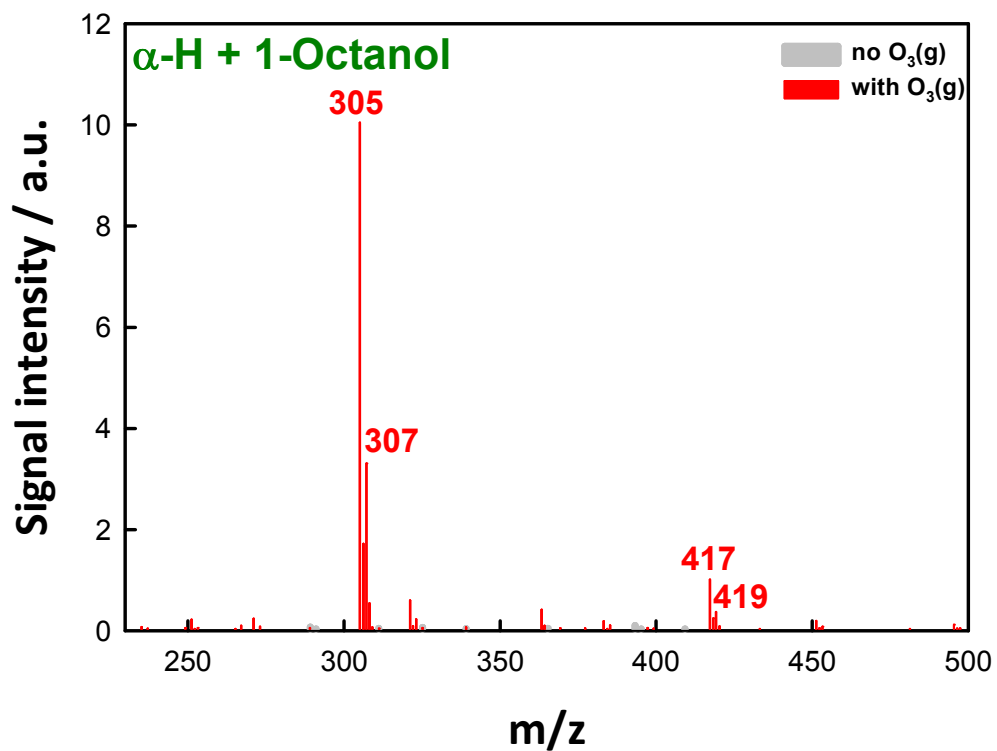


FIGURE S4: Negative ion mass spectra from 1 mM α -humulene (α -H) + 0.2 mM NaCl + 100 mM 1-octanol in AN:W (4:1 = vol:vol) solution microjets in the absence (gray) and presence of O₃(g) (red, $E = 1.4 \times 10^{11}$ molecules cm⁻³ s). The m/z 305;307 and 417;419 signals correspond to Cl⁻-adducts of α -hydroxy-hydroperoxides and α -alkoxy-hydroperoxides (C₂₃ ether species), respectively. See text for details.