

Supporting Information:

Excitation-emission spectra and fluorescence quantum yields for fresh and aged biogenic secondary organic aerosols

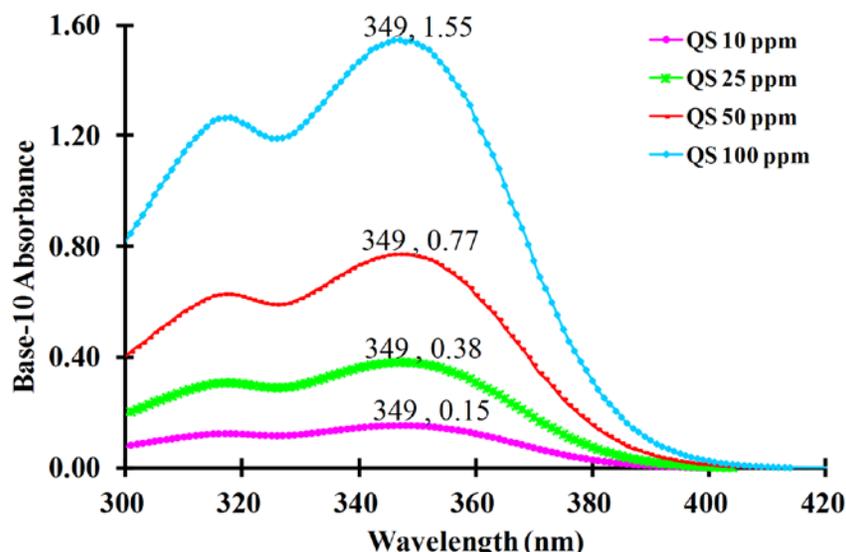
Hyun Ji (Julie) Lee,¹ Alexander Laskin,² Julia Laskin,³ and Sergey A. Nizkorodov^{1,*}

1. *Department of Chemistry, University of California, Irvine, California 92697, USA.*
2. *Environmental Molecular Sciences Laboratory, Pacific Northwest National Laboratory, Richland, Washington 99352, USA.*
3. *Chemical and Materials Sciences Division, Pacific Northwest National Laboratory, Richland, Washington 99352, USA.*

* Corresponding author phone and e-mail: 949-824-1262, nizkorod@uci.edu

Figure S1.

(a) Absorption spectra of solutions of QS (quinine sulfate or $(C_{20}H_{24}N_2O_2)_2 \cdot H_2SO_4 \cdot H_2O$) recorded at mass concentrations of 10, 25, 50 and 100 ppm. These solutions were too concentrated for the fluorescence measurements; they were used to measure the absorption coefficient for QS needed for the quantum yield measurements.



(b) Calibration of the measured base-10 absorbance vs. QS mass concentration in ppm. The QS concentration used in the fluorescence measurements was 0.1 ppm; the corresponding absorption coefficient calculated from the linear fit is 0.00155 cm^{-1} at the peak of the QS absorption spectrum (349 nm).

