Electronic Supplementary Information

Homogeneous Catalysis for Photochemical Vapor Generation for Speciation of Inorganic Selenium by High Performance Liquid Chromatography-Atomic Fluorescence Spectrometry

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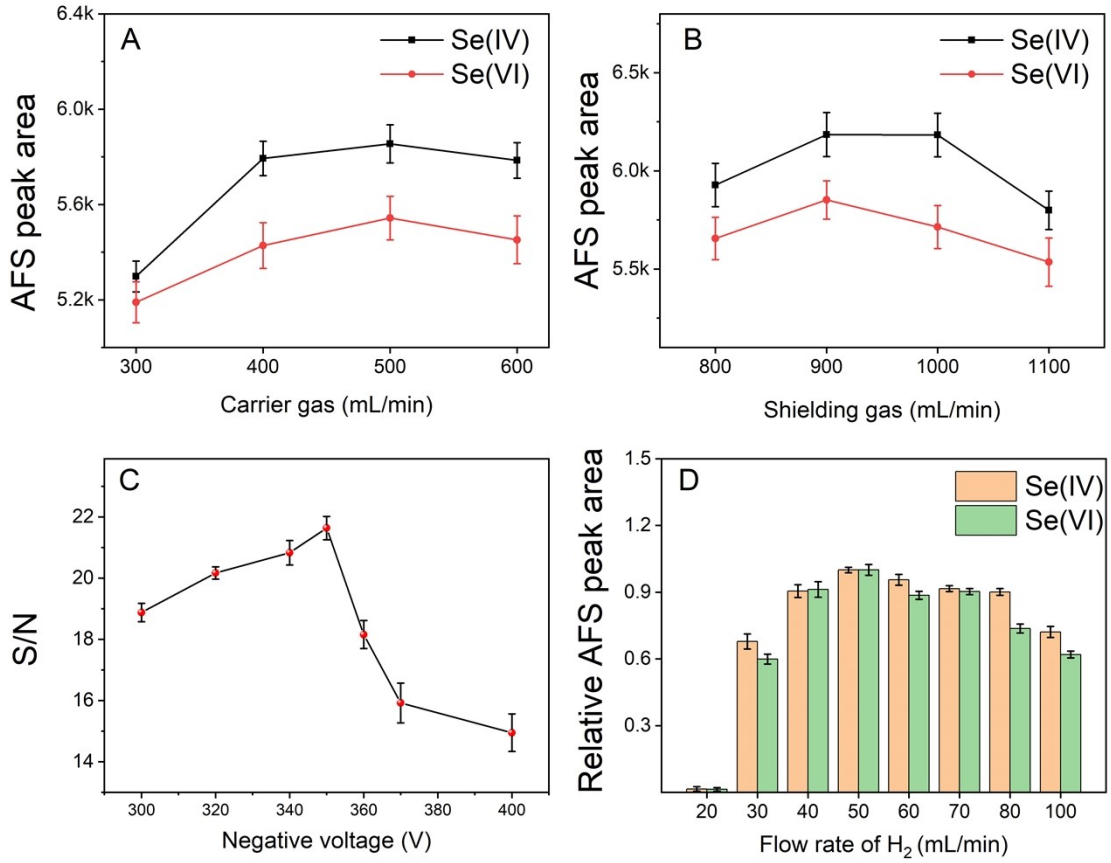

Figure S1 Optimization of AFS instrument parameters for the detection of Se. Both concentrations of Se(IV) and Se (VI): 1.0 μg/mL.

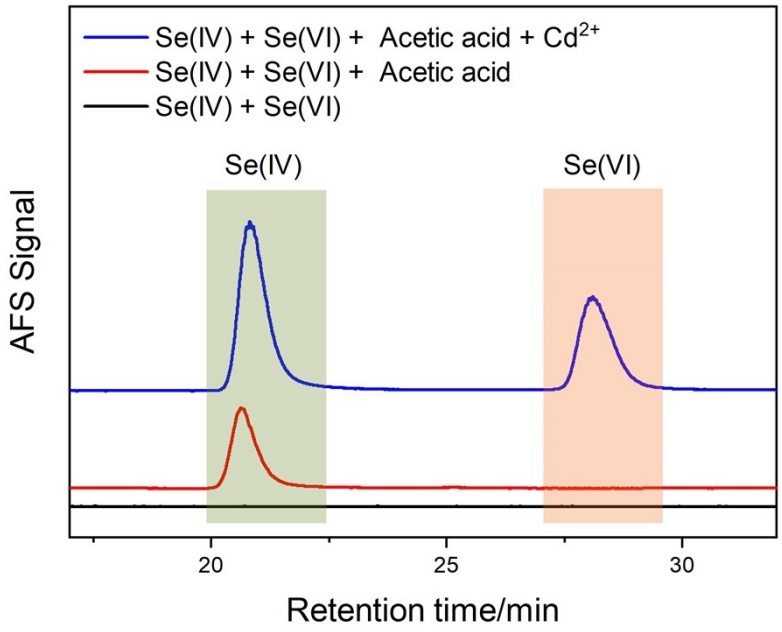

Figure S2. The effect of Cd ions on the AFS signal intensities of 1.0 μg/mL Se(IV) and Se(VI). AS19 Column, mobile phase: 5.0 mM Na_2CO_3-1.3 mM $NaHCO_3$, and flow rate: 0.30 mL/min.

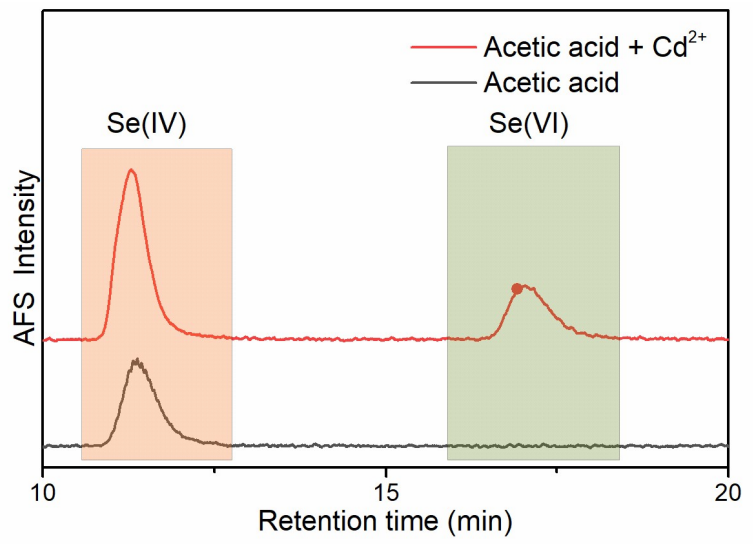

Figure S3. The chromatogram of phosphate buffer system. 40% acetic acid. PRP-X100 column, mobile phase: 100 mM Na_2HPO_3, Cd^{2+} ion: 60 μg/mL, flow rate: 0.30 mL/min, concentration of Se: 0.1 μg/mL.

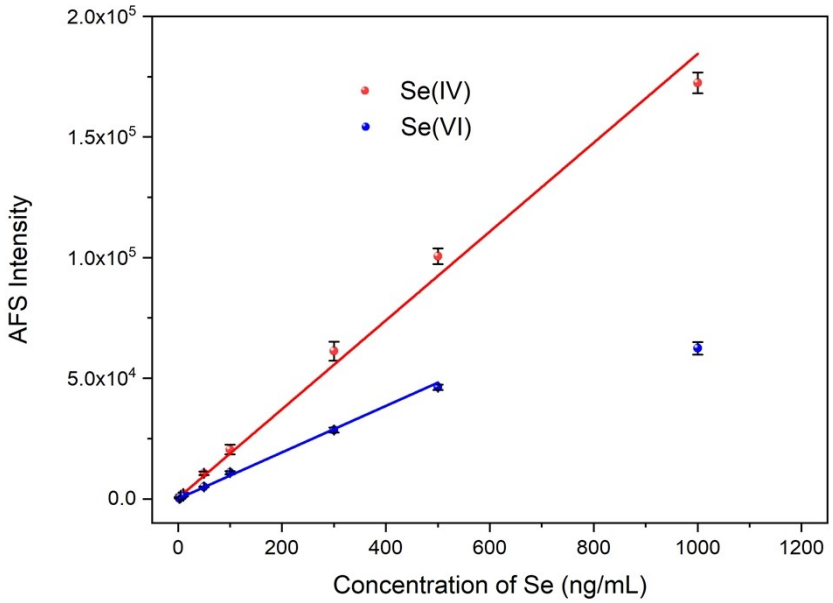

Figure S4 The calibration curve of Se(IV) and Se(VI) in carbonate buffer system..

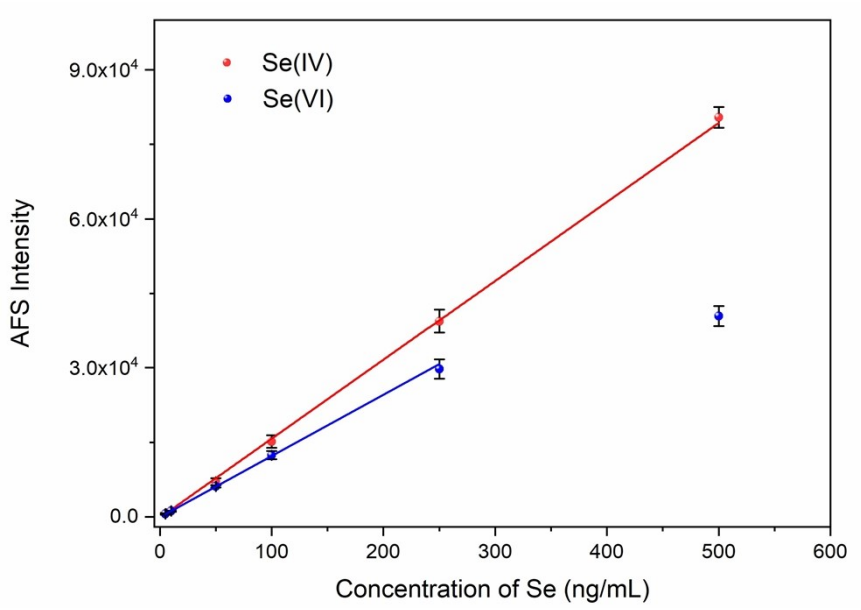

Figure S5 The calibration curve of Se(IV) and Se(VI) in phosphate buffer system.

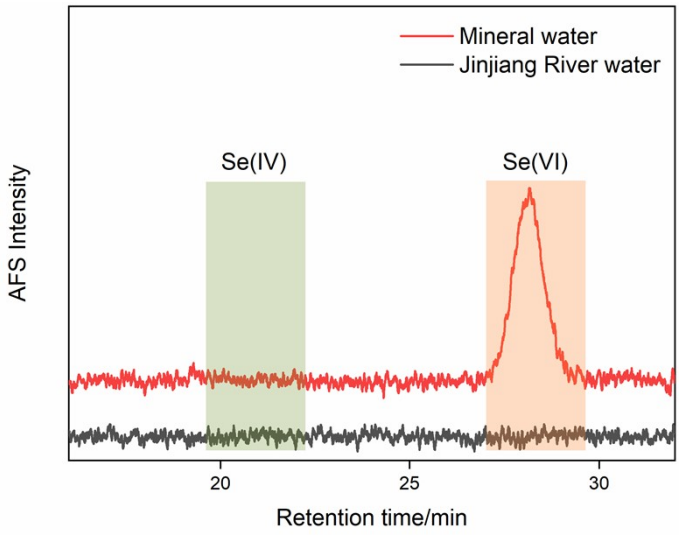

Figure S6 The chromatogram of the real environmental samples. The red line is related to mineral water, the black line is related to Jinjiang River water.