

Electronic Supplementary Information to

Solvent-assisted dispersive solid phase extraction of bisphenols using iron (III)

thenoyltrifluoroacetate complex (Fe(TTA)₃) as new nanostructured sorbent: A proof of concept

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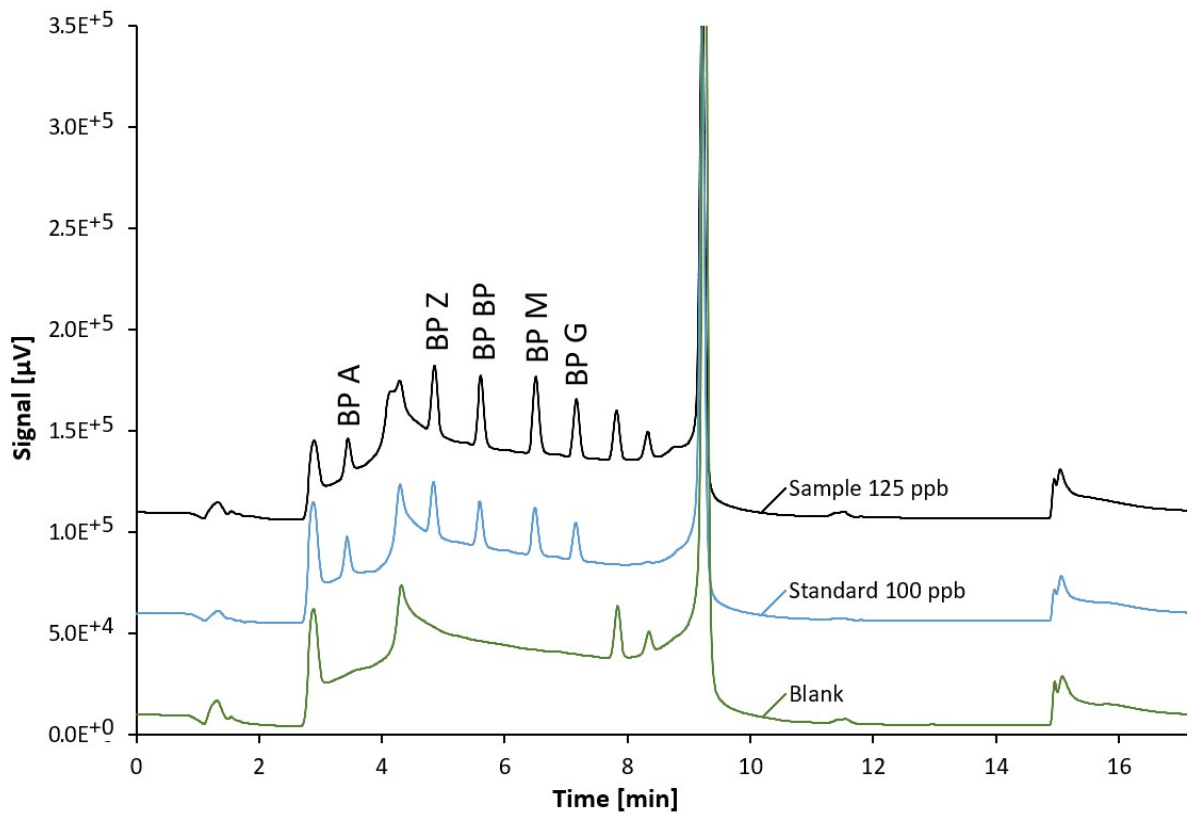
Content:

20 ESI-1: Representative chromatograms

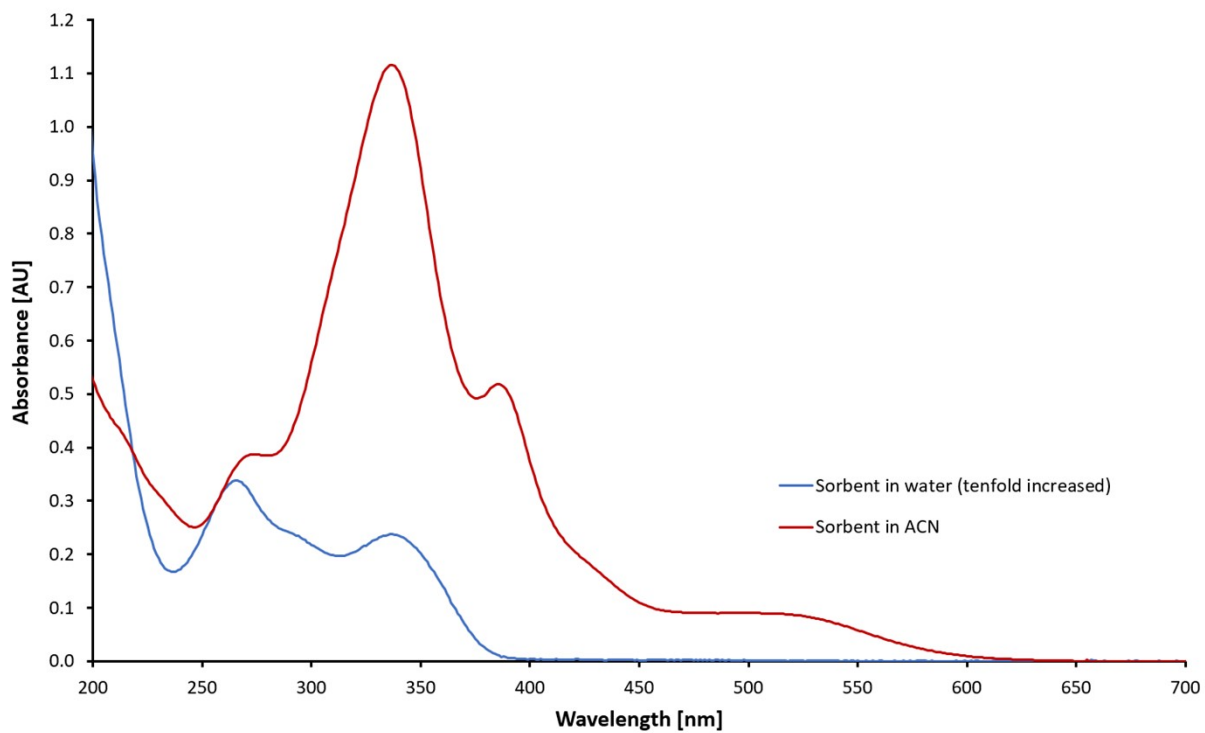
ESI -2: UV/VIS absorption spectra of Fe(TTA)₃ complex

ESI -3: Study of Fe(TTA)₃ complex stability at different pH values

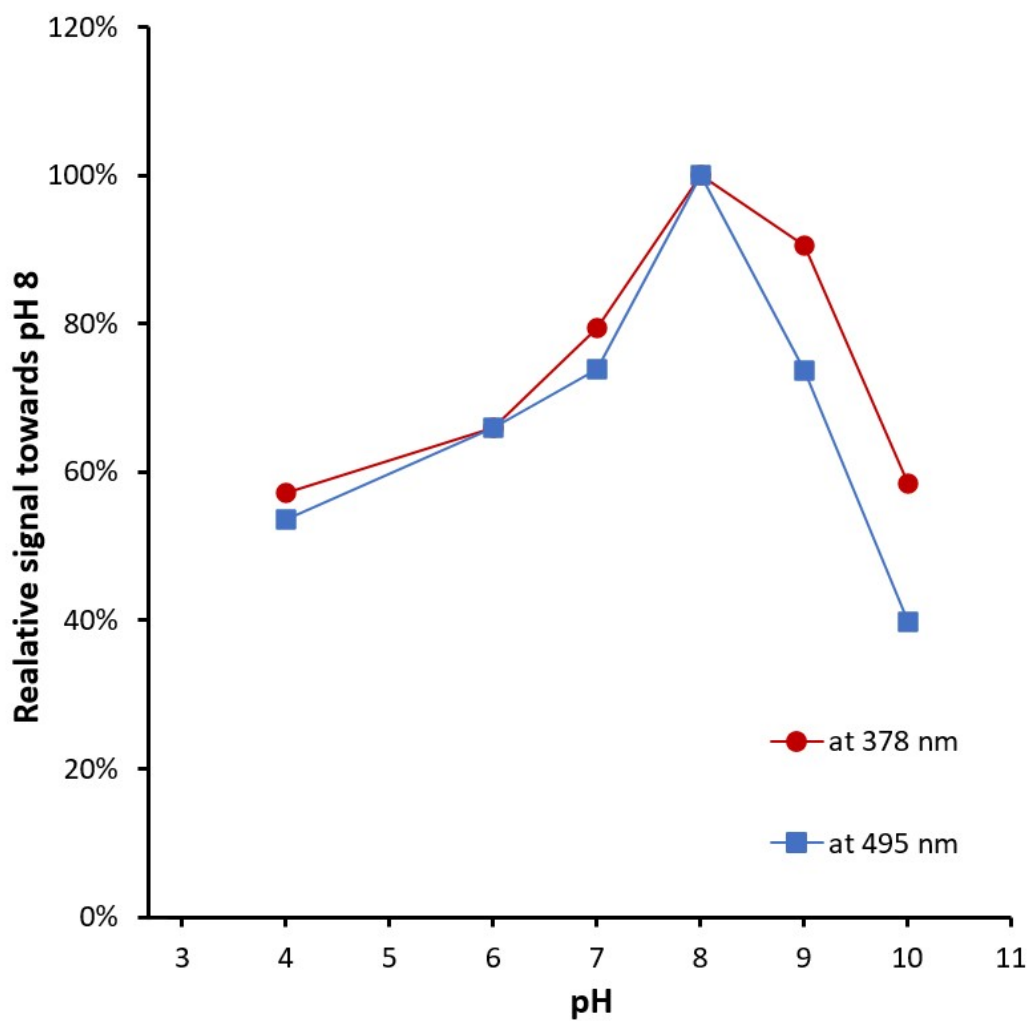
ESI -4: FT-IR spectra of 2-thenoyltrifluoroacetone



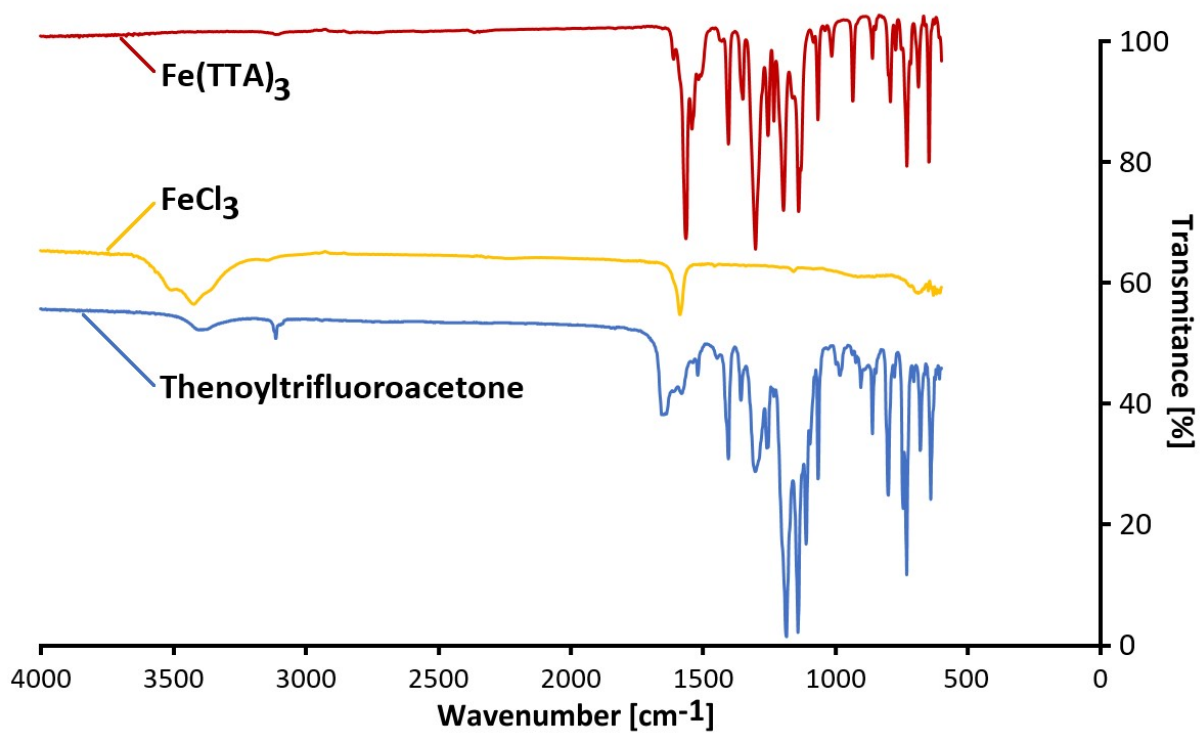
ESI-1: Representative chromatograms from MeOH extracts originating from $\text{Fe}(\text{TTA})_3$ -d μ SPE of blank WWTP effluent sample, 100 ppb mixed standard, and sample spiked at $125 \mu\text{g L}^{-1}$ concentration level. Conditions: flow rate of 1 mL/min, injection volume of 20 μL , mobile phase A: water, B: acetonitrile, 30 gradient elution, wavelength 230 nm, run time of 17.01 min. Peaks at 3 min, 4.5 min, and 8.7 min are related to the sorbent (partially complexed Fe^{3+} , pure TTA, and complex, respectively).



ESI-2: UV/VIS absorption spectra of Fe(TTA)₃ complex dissolved in acetonitrile at 15.5 mg L⁻¹ (red) and 35 distilled water, saturated with Fe(TTA)₃, tenfold increase (blue).



ESI-3: Study of $\text{Fe}(\text{TTA})_3$ complex stability at different pH values as described in section 3.1. Where 15 mg L^{-1} of $\text{Fe}(\text{TTA})_3$ was prepared in saturated octanol and equal volume of buffer solutions of pH 4, 6, 7, 8, 9, 10 was added and stirred for 10 mins and the octanol phase recovered and measured with UV/VIS spectrophotometer.



ESI-4: FT-IR spectra of 2-thenoyltrifluoroacetone represented by blue line, FeCl₃ by yellow line and
45 Fe(TTA)₃ by red line measured in ATR mode.