

Electronic supplementary information

Hollow fiber supported ionic liquid membrane microextraction for speciation of mercury by high-performance liquid chromatography-inductively coupled plasma mass spectrometry

Zhenhua Wang^{a,*}, *Qingzhong Xu*^a, *Saiyu Li*^a, *Lingyu Luan*^a, *Jian Li*^a, *Shengxiao Zhang*^b, *Houhuan Dong*^c

^a Shandong Analysis and Tester Center, Shandong Academy of Science, Jinan, China

^b College of Chemistry and Materials Science, Ludong University, Yantai, China

^c Product Quality Supervising and Inspecting Institute of Taizhou city, Jiangsu, China

Figures

Fig. S1 The selection of carrier on the extraction enrichment factor. The concentration of dithizone, 0.02% (m/v); TOPO 2.0 % (m/v); PAN 0.005% (m/v); the sample volume, 400 mL; the ionic liquid membrane, $[C_4MIM][PF_6]$; the acceptor phase, 1 g L^{-1} L-cysteine solution; extraction temperature, $50\text{ }^\circ\text{C}$; extraction time, 12 h.

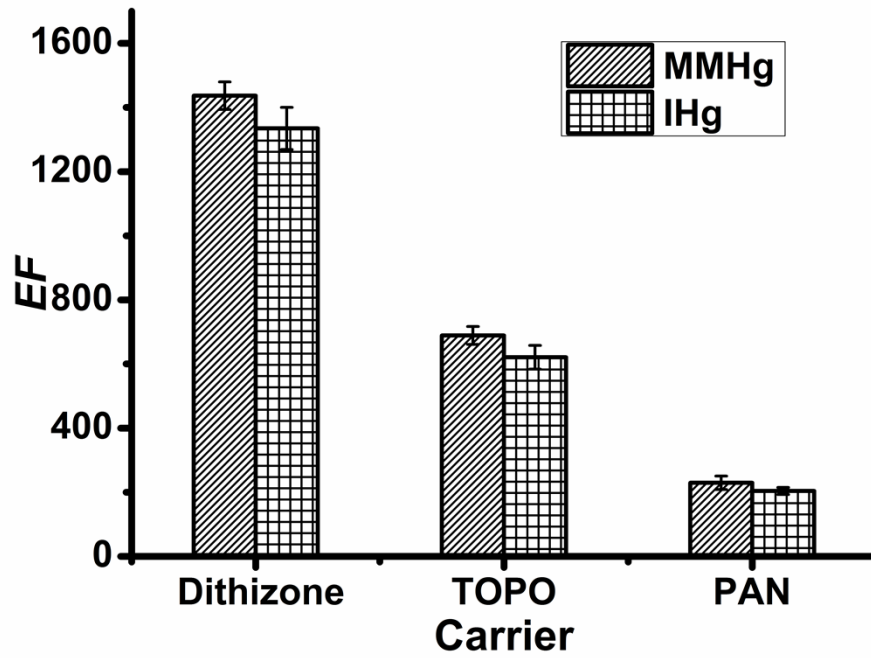


Fig. S2 The effect of dithizone concentration on the enrichment factors. The sample volume, 400 mL; the ionic liquid membrane, [C₄MIM][PF₆]; the acceptor phase, 1 g L⁻¹ L-cysteine solution; extraction temperature, 50 °C; extraction time, 12 h.

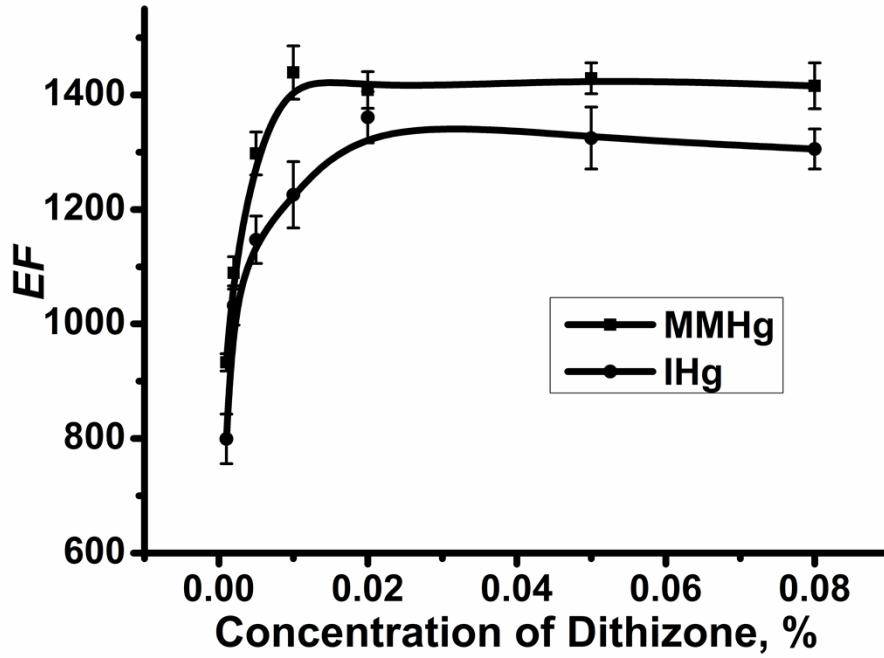


Fig. S3 The effect of stirring rate on extraction enrichment factor. The sample volume, 400 mL; the ionic liquid membrane, [C₄MIM][PF₆]; the acceptor phase, 1 g L⁻¹ L-cysteine solution; extraction temperature, 50 °C; extraction time, 12 h.

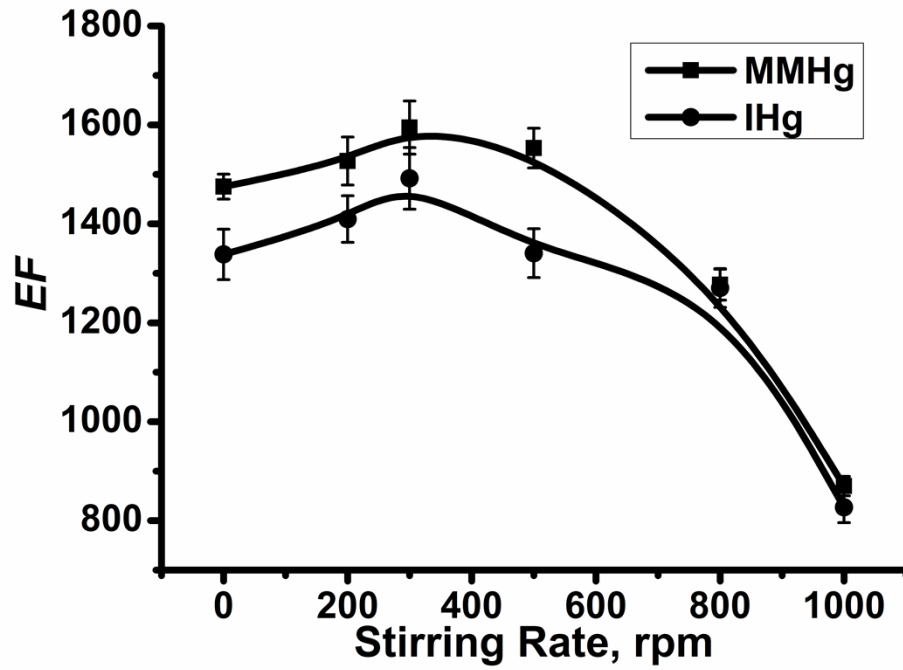


Fig. S4 The effect of extraction time on the extraction enrichment factor. The sample volume, 400 mL; the ionic liquid membrane, [C₄MIM][PF₆]; the acceptor phase, 1 g L⁻¹ L-cysteine solution; extraction temperature, 50 °C.

