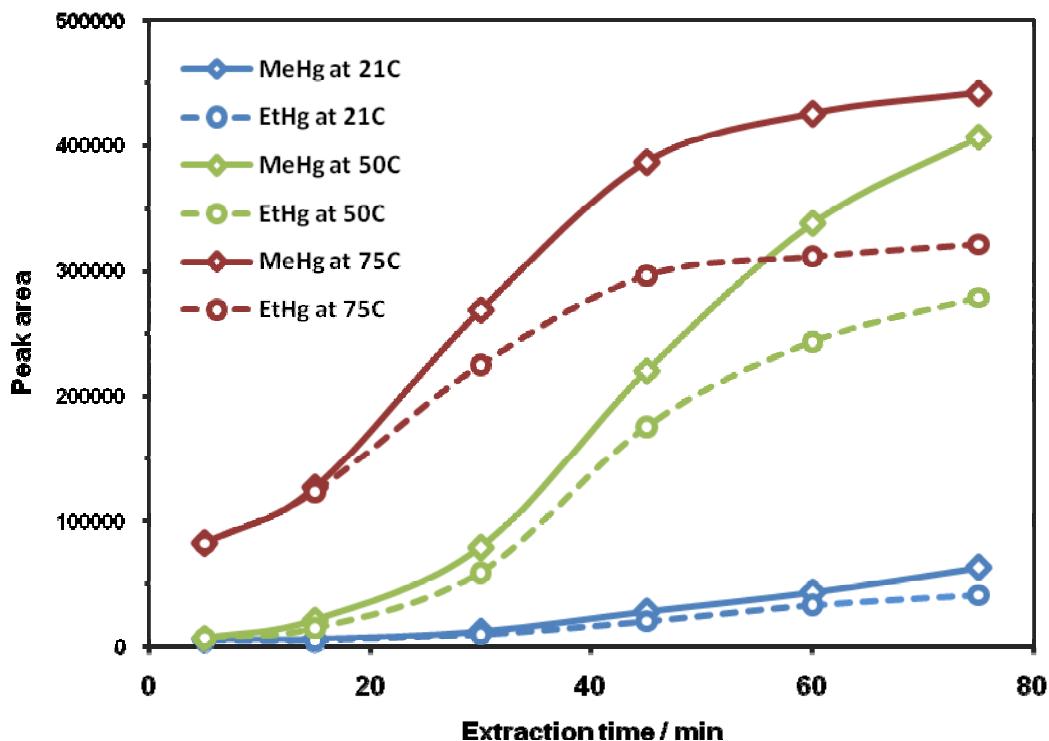
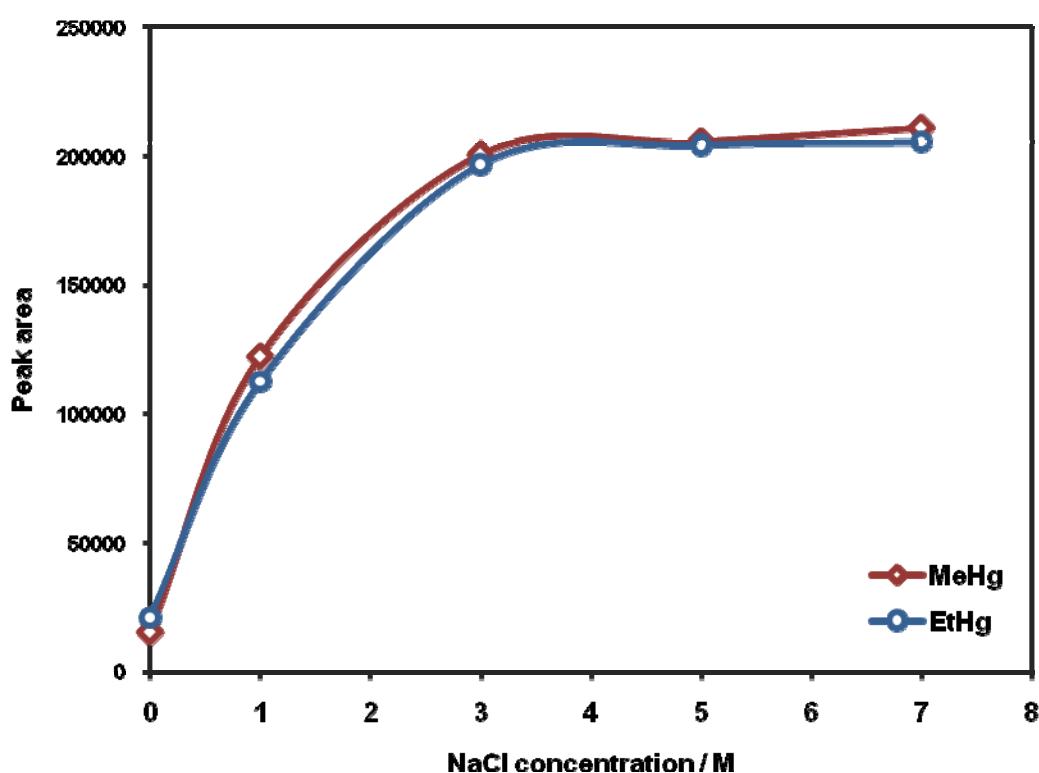


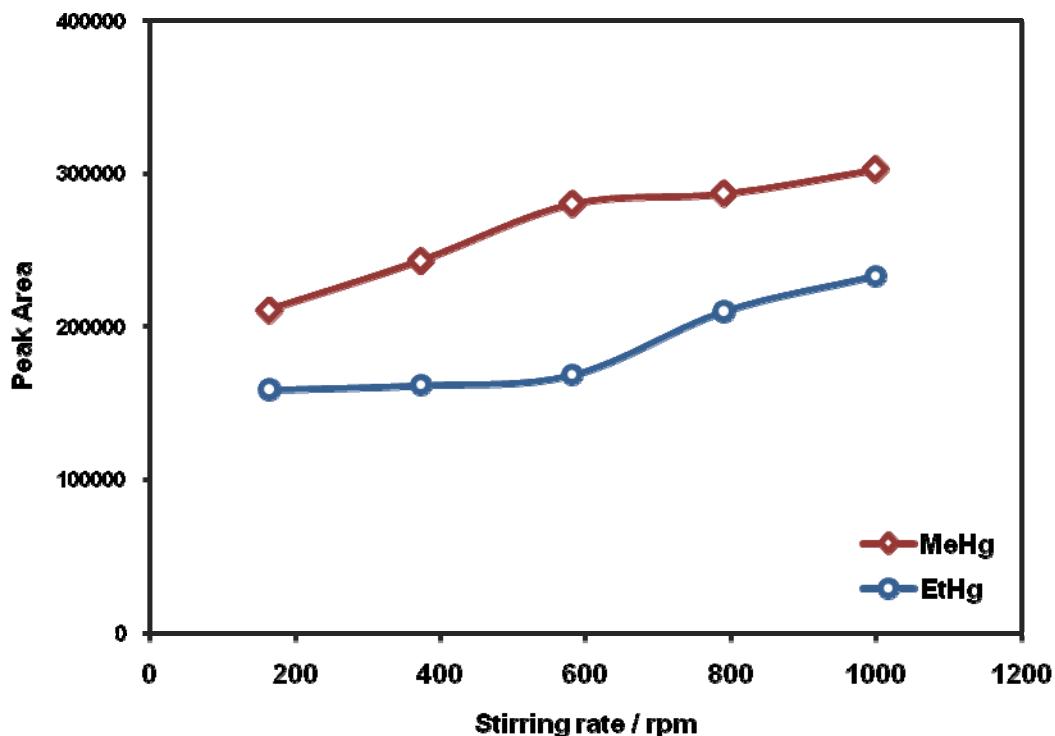
**Supplementary information (ESI) for Journal of Analytical Atomic Spectroscopy**



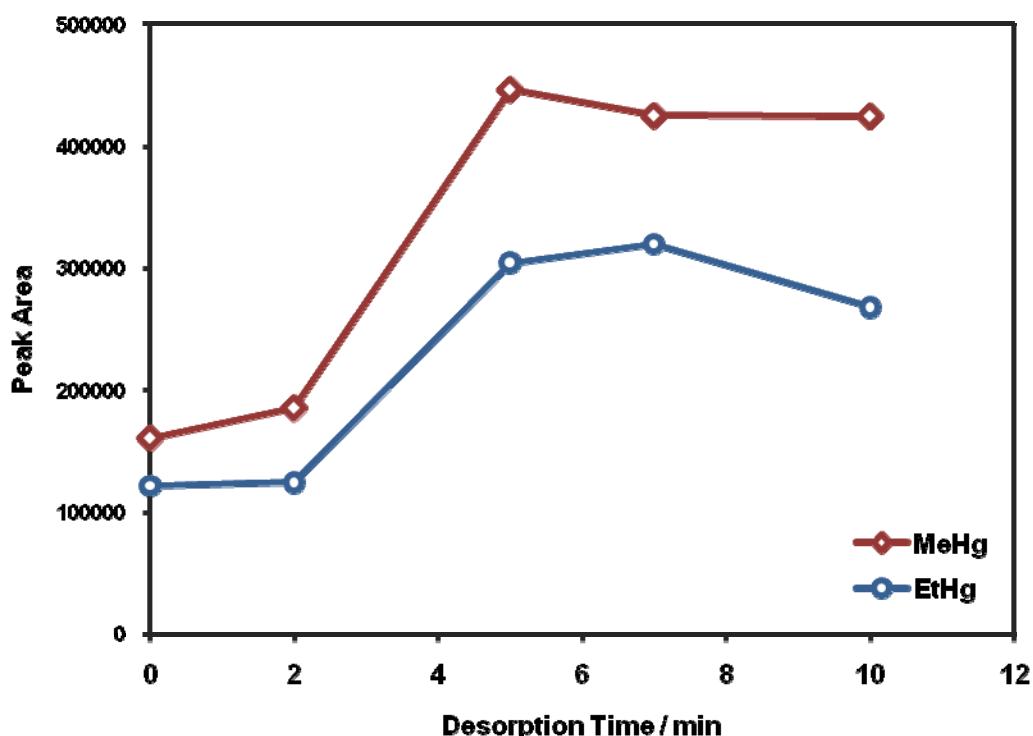
**Fig. S1** Temporal profile of SPME extraction of MeHg and EtHg at different temperatures. Fibre was exposed to the headspace of a  $25 \mu\text{g L}^{-1}$  standard solution.



**Fig. S2** Effect of NaCl salt concentration on extraction efficiency. Extraction was carried out at 75 °C for 45 min in the headspace of a 25  $\mu\text{g L}^{-1}$  standard containing different salt concentrations.



**Fig. S3** Effect of sample agitation rate on extraction efficiency. Extraction was carried out at 75 °C for 45 min in the headspace of 25  $\mu\text{g L}^{-1}$  standard solution containing 5M NaCl.



**Fig. S4** Effect of fibre desorption time on peak sensitivity. The fibre was immersed in the desorption chamber full of the mobile phase of choice after extraction of a  $25 \mu\text{g L}^{-1}$  standard solution under optimized conditions.