

# Simultaneous speciation of arsenic and selenium in human urine by high performance liquid chromatography inductively coupled plasma mass spectrometry

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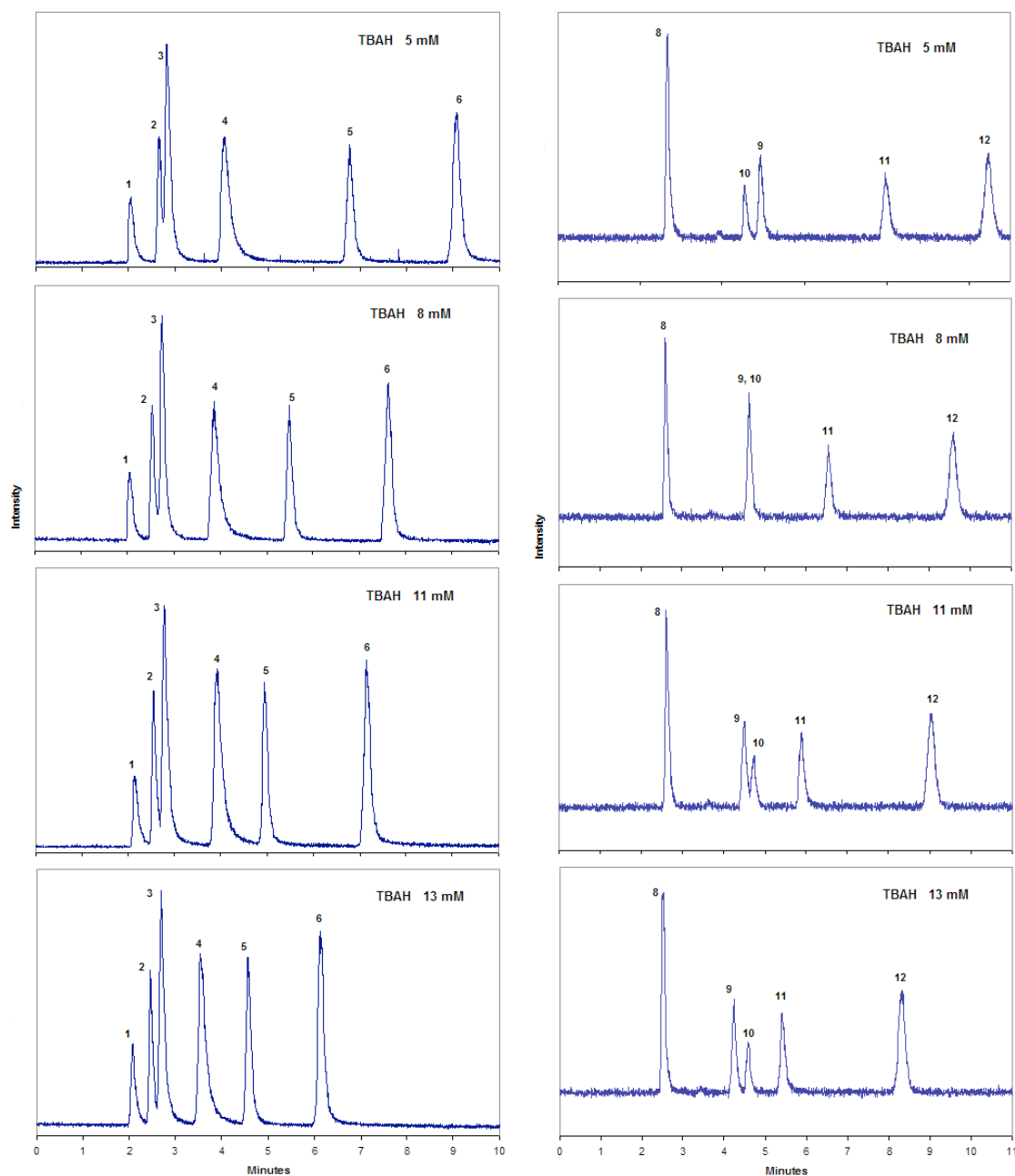
Electronic supplementary information.

Results of optimization studies.

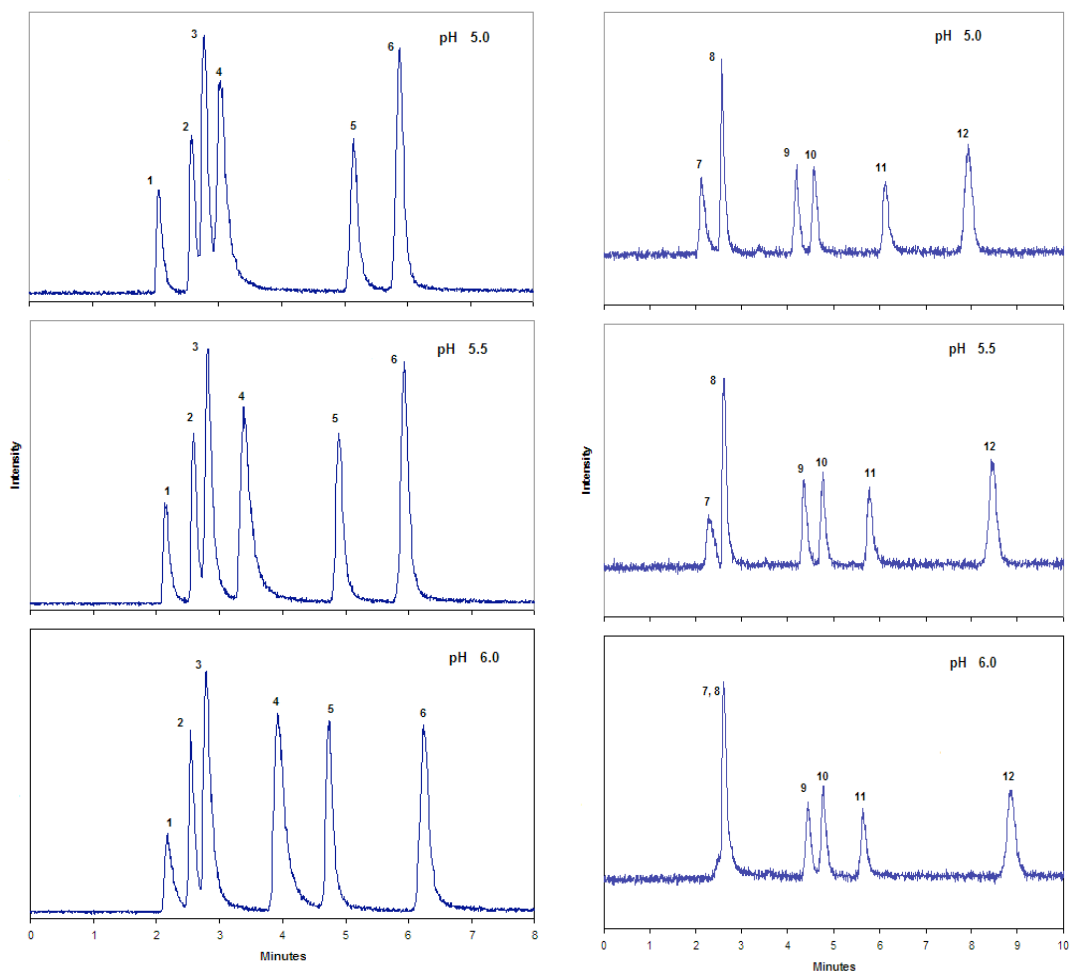
**Fig. 1** Effect of TBAH concentration (pH = 6.0) on the retention times of As (m/z 75) and Se (m/z 78) species: 1, AsC; 2, AsB; 3, AsIII; 4, DMA; 5, MMA; 6, AsV; 8, SeCys; 9, SeMet; 10, SeUr; 11, SeIV; and 12, SeEt.

**Fig. 2** Effect of mobile phase pH (TBAH concentration at 13 mmol l<sup>-1</sup>) on the retention times of As (m/z 75) and Se (m/z 78) species: 1, AsC; 2, AsB; 3, AsIII; 4, DMA; 5, MMA; 6, AsV; 7, TMSe; 8, SeCys; 9, SeMet; 10, SeUr; 11, SeIV; and 12, SeEt.

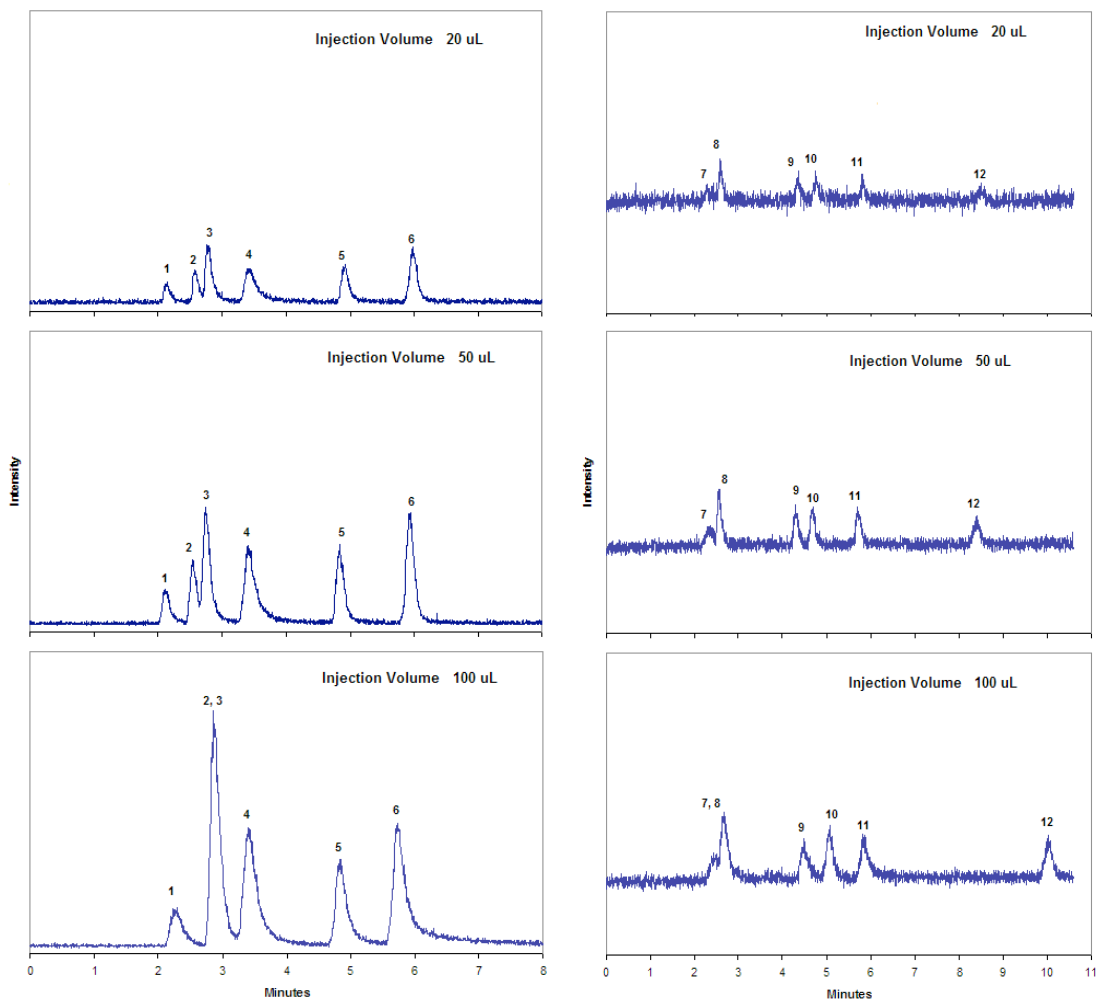
**Fig. 3** Effect of sample injection volume on the retention times and peak shapes of As (m/z 75) and Se (m/z 78) species: 1, AsC; 2, AsB; 3, AsIII; 4, DMA; 5, MMA; 6, AsV; 7, TMSe; 8, SeCys; 9, SeMet; 10, SeUr; 11, SeIV; and 12, SeEt.



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**Fig. 2** Effect of mobile phase pH (TBAH concentration at  $13 \text{ mmol l}^{-1}$ ) on the retention times of As ( $m/z$  75) and Se ( $m/s$  78) species: 1, AsC; 2, AsB; 3, AsIII; 4, DMA; 5, MMA; 6, AsV; 7, TMSe; 8, SeCys; 9, SeMet; 10, SeUr; 11, SeIV; and 12, SeEt.



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